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WESTCOAST TRANSMISSION COMPANY LIMITED

CONTROLLED ESTIMATED NATURAL GAS RESERVES

PEACE RIVER AREA, BRITISH COLUMBIA AND ALBERTA

SEPTEMBER 1, 1957

WESTCOAST TRANSMISSION COMPANY LIMITED

INCORPORATED IN CANADA
BY ACT OF PARLIAMENT

August 1, 1953

Mr. J. H. Macdonald,
President,
Canadian National Railway Company,
Ottawa, Ontario, Canada.

Dear Sir:

I have pleasure in replying to your letter of the 27th July 1953, in which you requested information regarding the proposed extension of the main line of the Canadian National Railway from the present terminus at the City of Vancouver to the City of Seattle, Washington, U.S.A.

It is understood that the proposed extension of the main line of the Canadian National Railway from the present terminus at the City of Vancouver to the City of Seattle, Washington, U.S.A., is a project of the Canadian National Railway Company, and that the proposed extension is being considered by the Canadian National Railway Company for the purpose of providing a direct rail route between the City of Vancouver and the City of Seattle, Washington, U.S.A. The proposed extension is being considered by the Canadian National Railway Company for the purpose of providing a direct rail route between the City of Vancouver and the City of Seattle, Washington, U.S.A.

The proposed extension of the main line of the Canadian National Railway from the present terminus at the City of Vancouver to the City of Seattle, Washington, U.S.A., is a project of the Canadian National Railway Company, and that the proposed extension is being considered by the Canadian National Railway Company for the purpose of providing a direct rail route between the City of Vancouver and the City of Seattle, Washington, U.S.A.

Yours faithfully,

J. H. Macdonald,
President,
Canadian National Railway Company.

10043

WESTCOAST TRANSMISSION COMPANY LIMITED

700 PACIFIC BUILDING

CALGARY, ALBERTA

September 1, 1957

Mr. Frank M. McMahon,
President,
Westcoast Transmission Company Limited,
Calgary, Alberta, Canada.

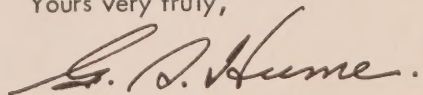
Dear Sir:

I submit herewith a detailed report on the company's controlled proved natural gas reserves in the Peace River Area of British Columbia and Alberta, as prepared by my department.

It is estimated that the proved in place gas reserve for the British Columbia portion of the Peace River Area as of September 1, 1957, is 2,481,301 million cubic feet. The in place reserve for the Alberta Portion is estimated at 1,068,015 million cubic feet. The recoverable reserve in the above areas after allowing for recovery and shrinkage is estimated at 1,858,867 and 880,594 million cubic feet respectively, giving a grand total of controlled proved recoverable reserve of 2,739,461 million cubic feet.

The information upon which this report is based is original data as obtained from the producers and compiled by this department.

Yours very truly,



G. S. Hume.



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WESTCOAST TRANSMISSION COMPANY LIMITED

CONTROLLED ESTIMATED NATURAL GAS RESERVES
PEACE RIVER AREA, BRITISH COLUMBIA AND ALBERTA

September 1, 1957.

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STATEMENT OF CONTROLLED ESTIMATED GAS SUPPLY IN BRITISH COLUMBIA

As of September 1, 1957.

Gas Volumes at 14.73 psia and 60° F.

<u>Field</u>	<u>Name of Producing Company</u>	<u>Company's Address</u>	<u>Effective Date of Contract</u>	<u>Remaining Term of Contract</u>	<u>Recoverable Pipeline Gas Reserves MMcf</u>
Contracted in British Columbia to Westcoast Transmission Company Ltd.					
Fort St. John Area (Including Airport, Charlie Lake, Fort St. John, Red Creek, Red Creek, north and Montney fields)	Pacific Petroleum Ltd.	Calgary, Alberta	Feb. 1, 1955	Life	806,124
West Buick Creek	Pacific Petroleum Ltd.	Calgary, Alberta			142,507
Kiskatinaw	Pacific Petroleum Ltd.	Calgary, Alberta			39,766
Sunrise	Pacific Petroleum Ltd.	Calgary, Alberta			57,222
Parkland	Pacific Petroleum Ltd.	Calgary, Alberta	Aug. 31, 1956.	Life	120,331
Kilkerran	Pacific Petroleum Ltd.	Calgary, Alberta	Aug. 31, 1956.	Life	21,262
Boundary Lake	Pacific Petroleum Ltd.	Calgary, Alberta	March 28, 1957	Life	28,466
Stoddart	Pacific Petroleum Ltd.	Calgary, Alberta	Aug. 26, 1957	Life	34,081
Loma	Pacific Petroleum Ltd.	Calgary, Alberta	Aug. 26, 1957	Life	3,917
Blueberry-Halfway	J.B. White, A. M. Lloyd, Nelson & Edward Morris Limited Lester Armour, Phillip D. Armour, E. F. McDonald Jr., E.W. Kneip Fund Guy S. Means Gulf States Oil Co. of Canada Fargo Oils Limited	Dallas, Texas Chicago, Illinois Fort Wayne, Indiana Houston, Texas Dallas, Texas	April 1955	20 Years	332,393
Gundy Creek	El Paso Natural Gas Company Gulf States Oil Co. of Canada	El Paso, Texas Houston, Texas	August 31, 1955	20 Years	33,198
Kobes Creek-Townsend Alaska Highway	Phillips Petroleum Company	Bartlesville, Oklahoma	Oct. 22, 1956	20 Years	239,600
Total Contracted in British Columbia					1,858,867

STATEMENT OF CONTROLLED ESTIMATED GAS SUPPLY IN ALBERTA

As of September 1, 1957

Gas Volumes at 14.73 psia and 60° F.

<u>Field</u>	<u>Name of Producing Company</u>	<u>Company's Address</u>	<u>Effective Date Of Contract</u>	<u>Remaining Term of Contract</u>	<u>Recoverable Pipeline Gas Reserves MMcf</u>
<u>Contracted in Alberta to Westcoast Transmission Co. (Alberta) Ltd.</u>					
Belloy	Imperial Oil Limited	Calgary, Alberta	Feb. 21, 1955	Life	77,198
Gordondale	Royalite Oil Company Limited Canadian Fina Oil Limited	Calgary, Alberta Calgary, Alberta	Feb. 9, 1955	Life	154,119
Pouce Coupe	Pacific Petroleum Ltd. Peace River Natural Gas Co. Ltd.	Calgary, Alberta Calgary, Alberta	Feb. 1, 1955	Life	217,670
Pouce Coupe Extension (Pathfinder)	Pathfinder Petroleum Limited	Calgary, Alberta	Feb. 1, 1955	Life	
South Pouce Coupe	Pacific Petroleum Ltd.	Calgary, Alberta	Feb. 1, 1955	Life	188,639
Saddle Hills	Royalite Oil Company Limited Canadian Fina Oil Limited	Calgary, Alberta Calgary, Alberta	Feb. 2, 1955	Life	50,036
Whitelaw	Shell Oil Company Limited British American Oil Co. Ltd.	Calgary, Alberta Calgary, Alberta	March 9, 1955	20 Years	<u>192,932</u>
			April 14, 1955	20 Years	
Total Contracted in Alberta					880,594

CONTROLLED ESTIMATED GAS RESERVES

PEACE RIVER AREA, ALBERTA AND BRITISH COLUMBIA, CANADA

Gas Volumes at 14.73 psia and 60° F.

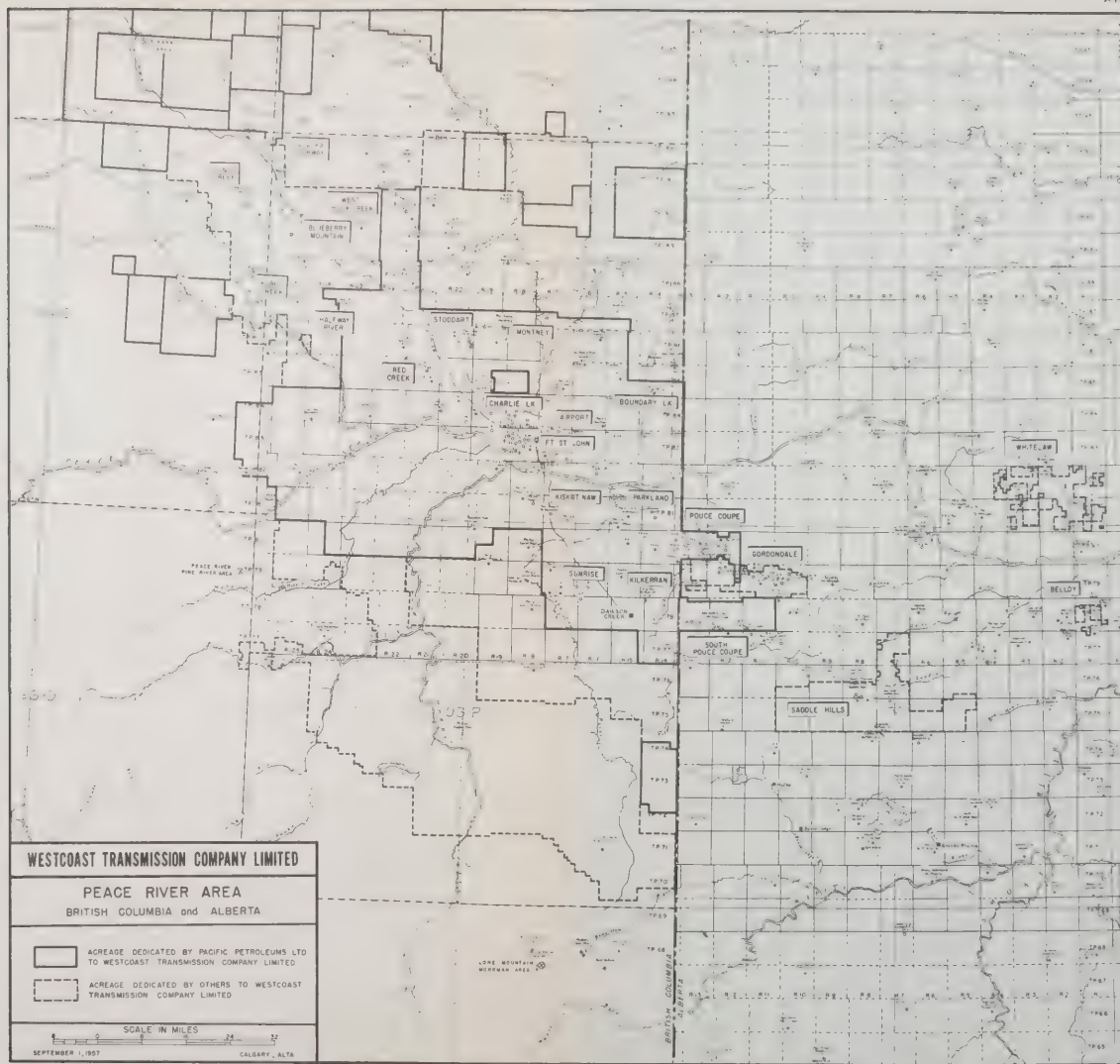
Field	MMcf Original Gas in Place	MMcf Original Recoverable Gas	MMcf Pipeline Gas
<u>BRITISH COLUMBIA</u>			
Alaska Highway	53,899	43,697	40,208
Airport	66,176	55,485	48,668
Blueberry Mountain	393,965	334,871	306,245
Boundary Lake	36,797	31,277	28,466
Charlie Lake	51,332	41,568	35,718
Fort St. John	658,206	550,014	480,635
Fort St. John, Southeast	232,855	195,537	173,462
Gundy Creek	44,134	37,514	33,198
Halfway River	31,794	26,503	23,670
Kilkerran	27,488	23,365	21,262
Kiskatinaw	50,675	43,074	39,766
Kobes Creek - Townsend	264,965	219,784	201,870
Loma	5,120	4,352	3,917
Montney	18,779	15,962	12,569
Parkland	151,045	128,388	120,331
Red Creek	82,440	70,074	55,072
Stoddart	43,582	37,045	34,081

CONTROLLED ESTIMATED GAS RESERVES

PEACE RIVER AREA, ALBERTA AND BRITISH COLUMBIA, CANADA

Gas Volumes at 14.73 psia and 60° F.

Field	<u>MMcf</u> <u>Original Gas</u> in Place	<u>MMcf</u> <u>Original</u> Recoverable Gas	<u>MMcf</u> <u>Pipeline</u> Gas
<u>BRITISH COLUMBIA</u>			
Sunrise	77,853	58,390	57,222
West Buick Creek	190,196	161,667	142,507
TOTAL - BRITISH COLUMBIA	<u>2,481,301</u>	<u>2,078,567</u>	<u>1,858,867</u>
<u>ALBERTA</u>			
Belloy	93,342	79,342	77,198
Gordondale	189,627	157,264	154,119
Pouce Coupe	263,554	222,112	217,670
Pouce Coupe, South	223,400	194,195	188,639
Saddle Hills	63,726	53,123	50,036
Whitelaw	234,366	199,210	192,932
TOTAL - ALBERTA	<u>1,068,015</u>	<u>905,246</u>	<u>880,594</u>
TOTAL - ALBERTA & BRITISH COLUMBIA	<u>3,549,316</u>	<u>2,983,813</u>	<u>2,739,461</u>

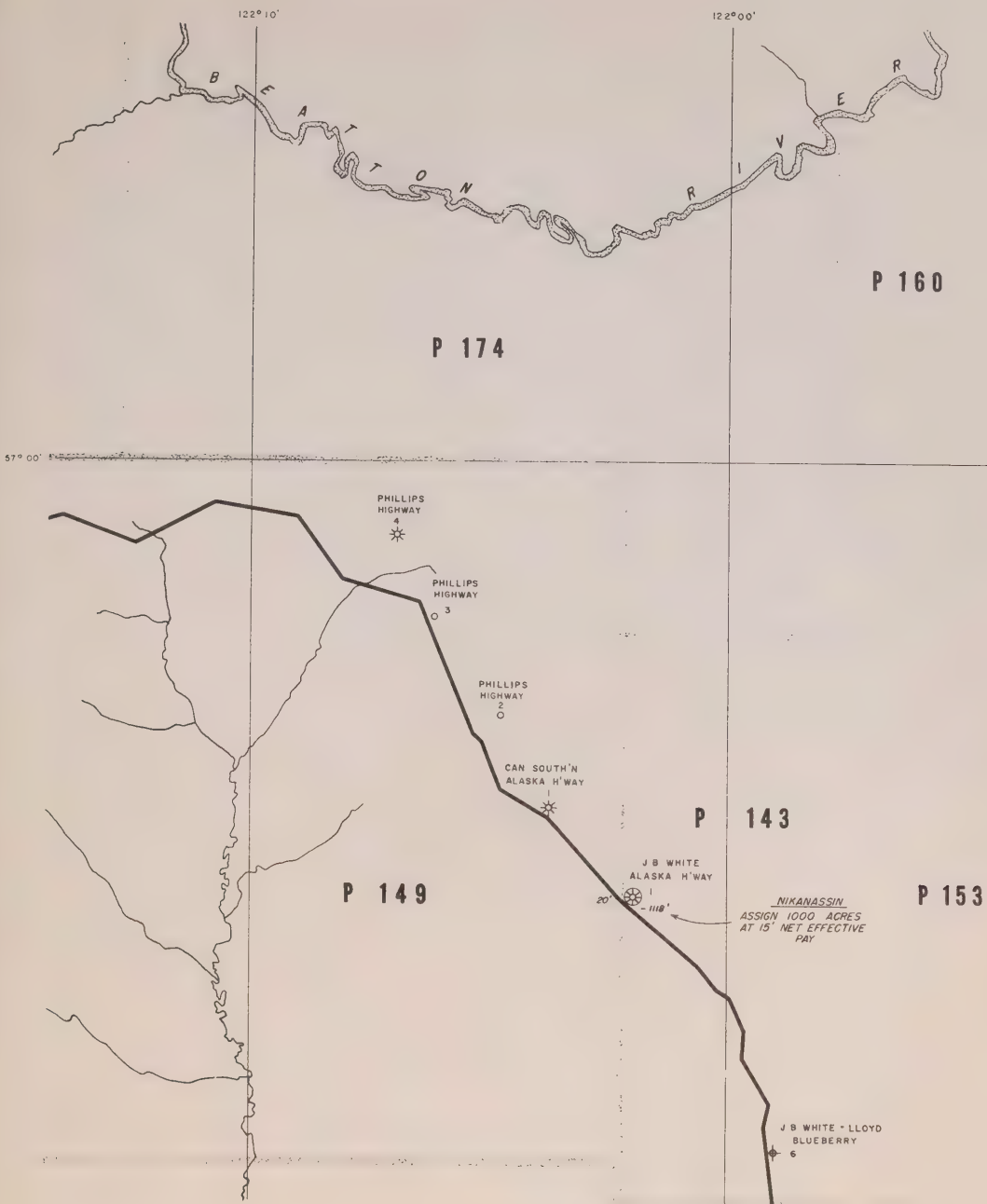


ALASKA HIGHWAY FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F

1. Reservoir	NIKANASSIN	UPPER TRIASSIC	MISSISSIPPIAN	TOTAL FIELD
2. Geologic Age	L. Cretaceous	Triassic	Mississippian	
3. Average Depth, Feet	4,426	4,730	7,200	
4. Completed Gas Wells	1	3	1	
5. Proved Area, Acres	1,000	3,014	6,090	
6. Average Pay Thickness, Feet	15.0	13.5	21.1	
7. Acre - Feet	15,000	40,580	128,541	
8. Average Porosity, Per Cent	8.6	8.5	4.0 (E)	
9. Average Connate Water, Per Cent	35	20	25	
10. Initial Reservoir Pressure, psia	1,525	1,671	3,200 (E)	
11. Reservoir Temperature, Degrees R.	573	581	620	
12. Specific Gravity of Gas	.667	.670	.614	
13. Gas Deviation Factor	.810	.805	.872	
14. Original Gas in Place, Mcf/Ac.Ft.	242	374	273	
15. Original Gas in Place, MMcf	3,630	15,177	35,092	53,899
16. Recovery Factor, Per Cent	75	85	80	
17. Original Recoverable Gas, MMcf	2,723	12,900	28,074	43,697
18. Shrinkage, Fuel, etc., Per Cent	9.0	11.0	6.5	
19. Pipeline Gas Reserve, MMcf	2,478	11,481	26,249	40,208

Operating Company: Phillips Petroleum Company



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

ALASKA HIGHWAY AREA
BRITISH COLUMBIA

NIKANASSIN

SCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

CALGARY, ALTA

P 174

57° 00'

P 143







P 153

P 149

J B WHITE - LLOYD
BLUEBERRY

WEST OF SIXTH MERIDIAN

-LEGEND-

-  GAS WELL
 OIL WELL
 DRY & ABANDONED
 COMPLETED WELL IN THIS ZONE
 SUSPENDED WELL
 PRINCIPAL ROADS

ALASKA HIGHWAY AREA
BRITISH COLUMBIA

STRUCTURE MAP
CONTOURS TOP OF UPPER TRIASSIC

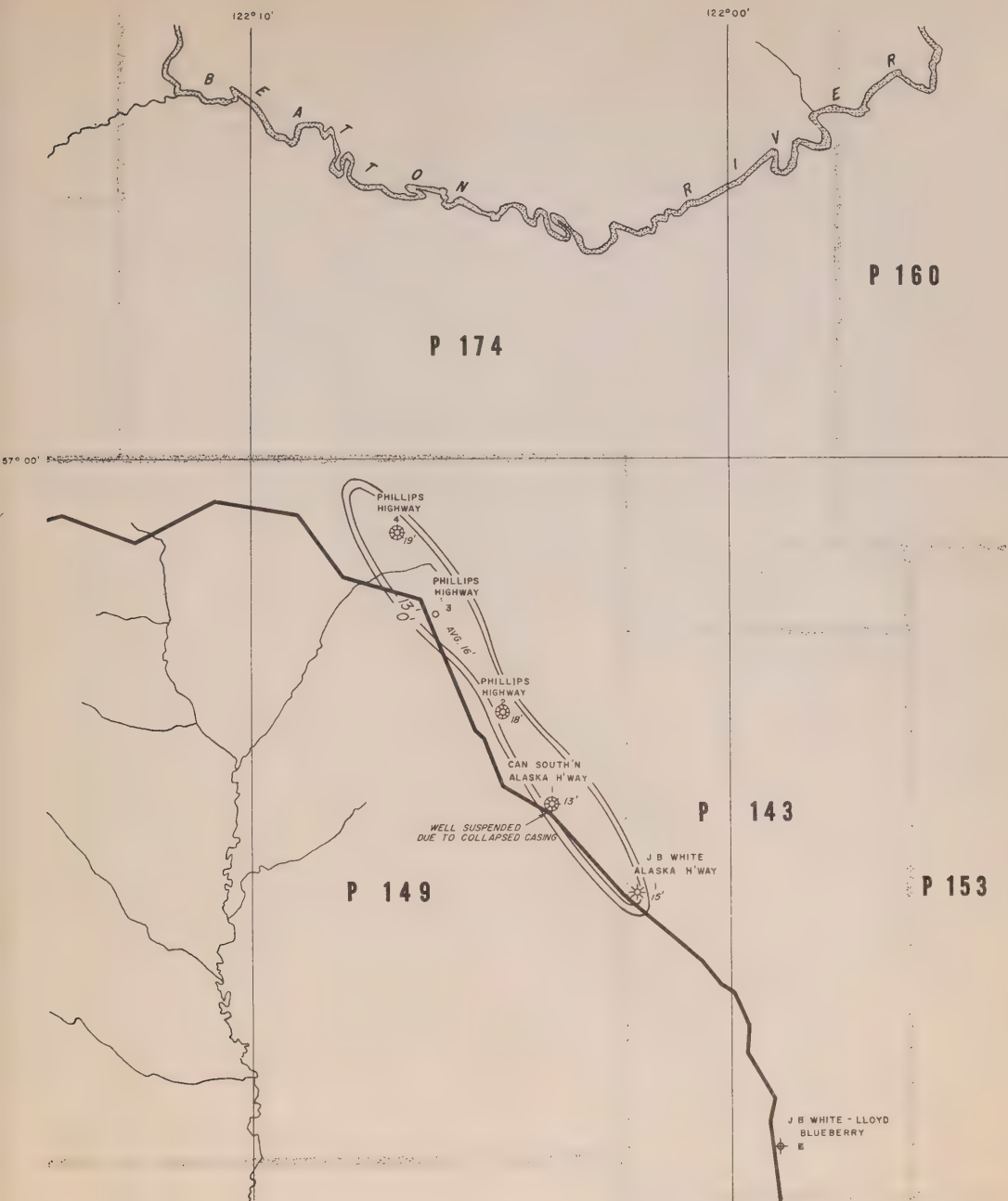
SCALE IN MILES



WESTCOAST TRANSMISSION CO.

SEPTEMBER, 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

ALASKA HIGHWAY AREA
BRITISH COLUMBIA

ISOPACHOUS MAP
UPPER TRIASSIC

SCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA

BLUEBERRY MOUNTAIN FIELD

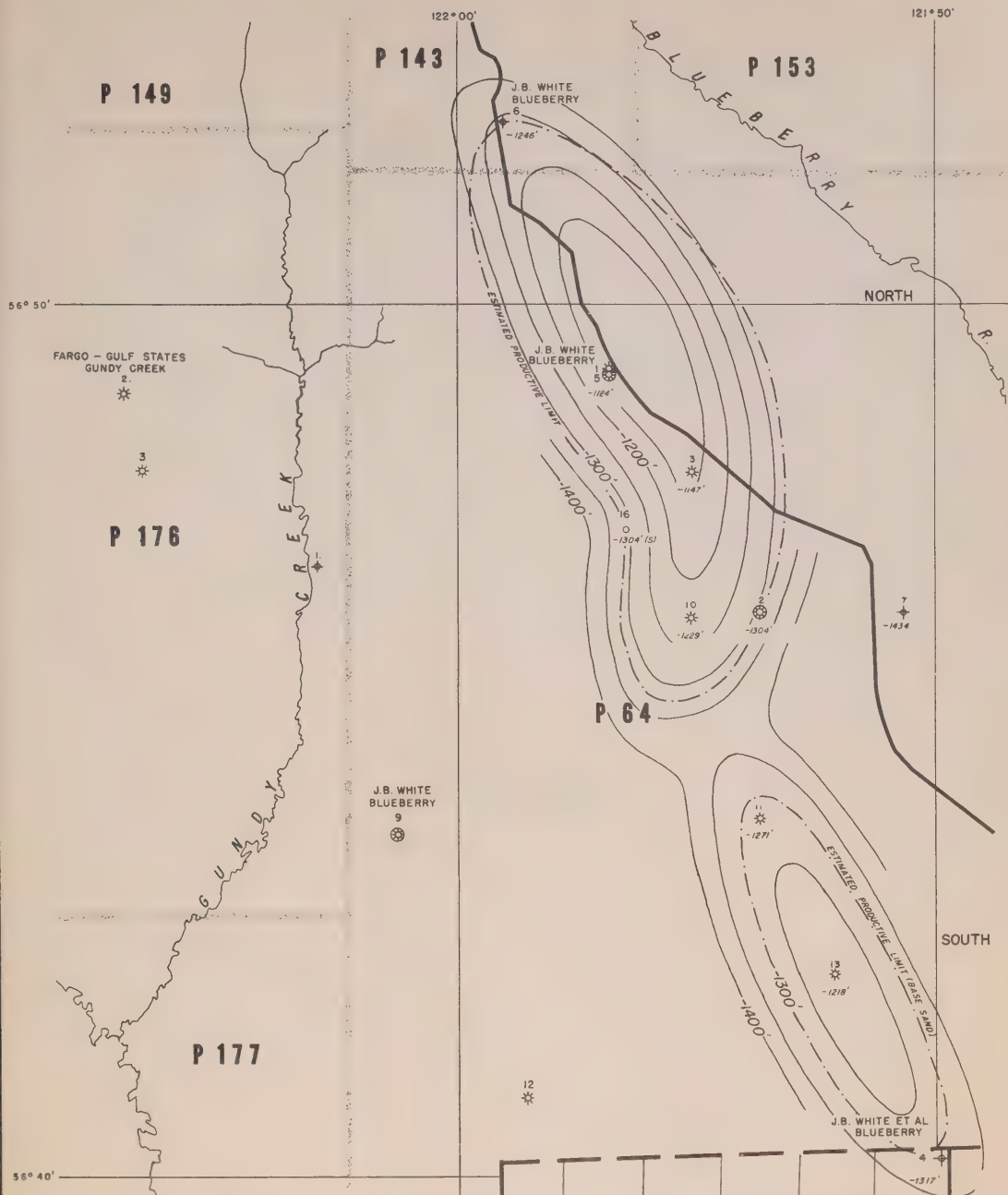
BRITISH COLUMBIA, CANADA

ESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	North NIKANASSIN	South NIKANASSIN	Blueberry #9 NIKANASSIN	North UPPER TRIASSIC	South UPPER TRIASSIC	Blueberry #12 UPPER TRIASSIC	MISSISSIPPIAN	TOTAL FIELD
2. Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	Triassic	Triassic	Triassic	Mississippian	
3. Average Depth, Feet	4,325	4,050	4,100	4,600	4,300	4,060	6,870	
4. Completed Gas Wells	2	0	1	1	1	1	4	
5. Proved Area, Acres	12,071	3,961	1,000	5,774	1,973	1,500	9,640	
6. Average Pay Thickness, Feet	27.0	15.4	17.0	28.0	12.8	12.0	32.2	
7. Acre - Feet	325,727	61,178	17,000	161,935	25,223	18,000	310,785	
8. Average Porosity, Per Cent	8.9	8.9	8.7	10.0	10.0	10.0	10.8	
9. Average Connate Water, Per Cent	30	30	30	20	20	20	25	
10. Initial Reservoir Pressure, psia	1,386	1,386	1,387	1,690	1,692	1,690	2,676	
11. Reservoir Temperature, Degrees R.	592	592	594	600	601	600	632	
12. Specific Gravity of Gas	.667	.667	.667	.684	.684	.684	.708	
13. Gas Deviation Factor	.839	.839	.839	.822	.822	.822	.819	
14. Original Gas in Place, Mcf/Ac.Ft.	267	267	262	421	421	421	643	
15. Original Gas in Place, MMcf	86,969	16,335	4,454	68,175	10,619	7,578	199,835	393,965
16. Recovery Factor, Per Cent	85	85	85	85	85	85	85	
17. Original Recoverable Gas, MMcf	73,924	13,885	3,786	57,949	9,026	6,441	169,860	334,871
18. Shrinkage, Fuel, etc., Per Cent	8.0	8.0	8.0	10.5	10.5	10.5	8.0	
19. Pipeline Gas Reserve, MMcf	68,010	12,774	3,483	51,864	8,078	5,765	156,271	306,245

Operating Company: J. B. White and A. M. Lloyd



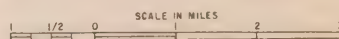
WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

BLUEBERRY MT. AREA BRITISH COLUMBIA

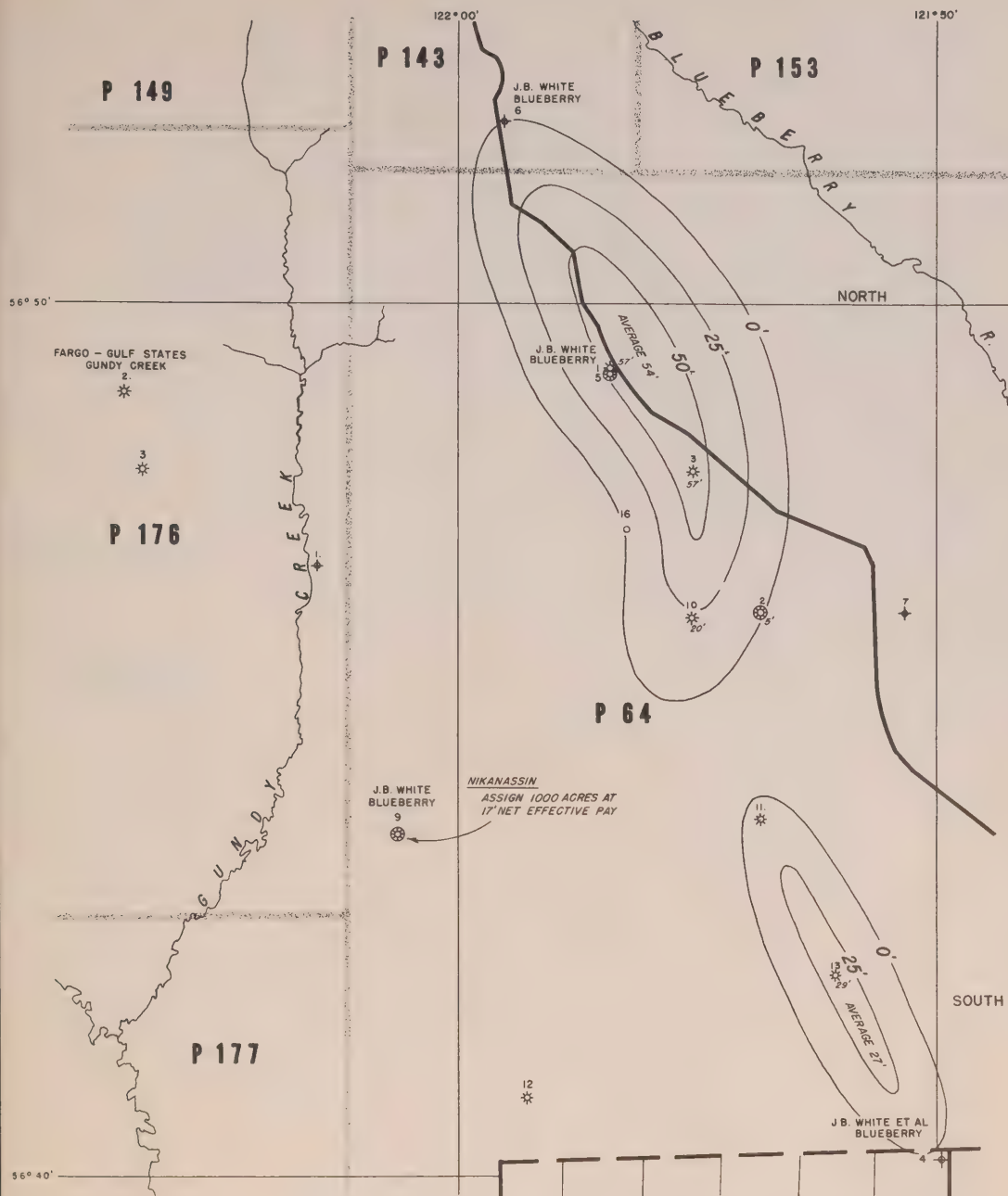
STRUCTURE MAP
 CONTOURS ON TOP OF NIKANASSIN SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA



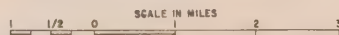
WEST OF SIXTH MERIDIAN

-LEGEND-

- ✱ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

BLUEBERRY MT. AREA BRITISH COLUMBIA

ISOPACHOUS MAP NIKANASSIN SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA

P 149

P 143

P 153

"GUNDY CREEK FIELD"

UPPER TRIASSIC
ASSIGN 2000 ACRES @
24' EFFECTIVE PAY

FARGO - GULF STATES
GUNDY CREEK



-1730

P 176

TRIASSIC "D"
ASSIGN 1000 ACRES @
10' EFFECTIVE PAY

GUNDY CREEK No 4 (Drilling)
UPPER TRIASSIC (-1760)
ASSIGN 2000 ACRES @
17' NET EFFECTIVE PAY

P 177

J.B. WHITE
BLUEBERRY

* -1685'

12
-1566'

J.B. WHITE
BLUEBERRY

* -1608'

J.B. WHITE
BLUEBERRY

* -1572'

NR

-1700'

-1600'

-1547'

16

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-1581'

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P 64

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J.B. WHITE ET AL
BLUEBERRY

4

* -1739'

WEST OF SIXTH MERIDIAN

-LEGEND-

GAS WELL



OIL WELL



DRY & ABANDONED



COMPLETED WELL IN THIS ZONE



SUSPENDED WELL



PRINCIPAL ROADS

BLUEBERRY MT. AREA
BRITISH COLUMBIA

STRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC
 SHOWING GUNDY CREEK ASSIGNED RESERVES

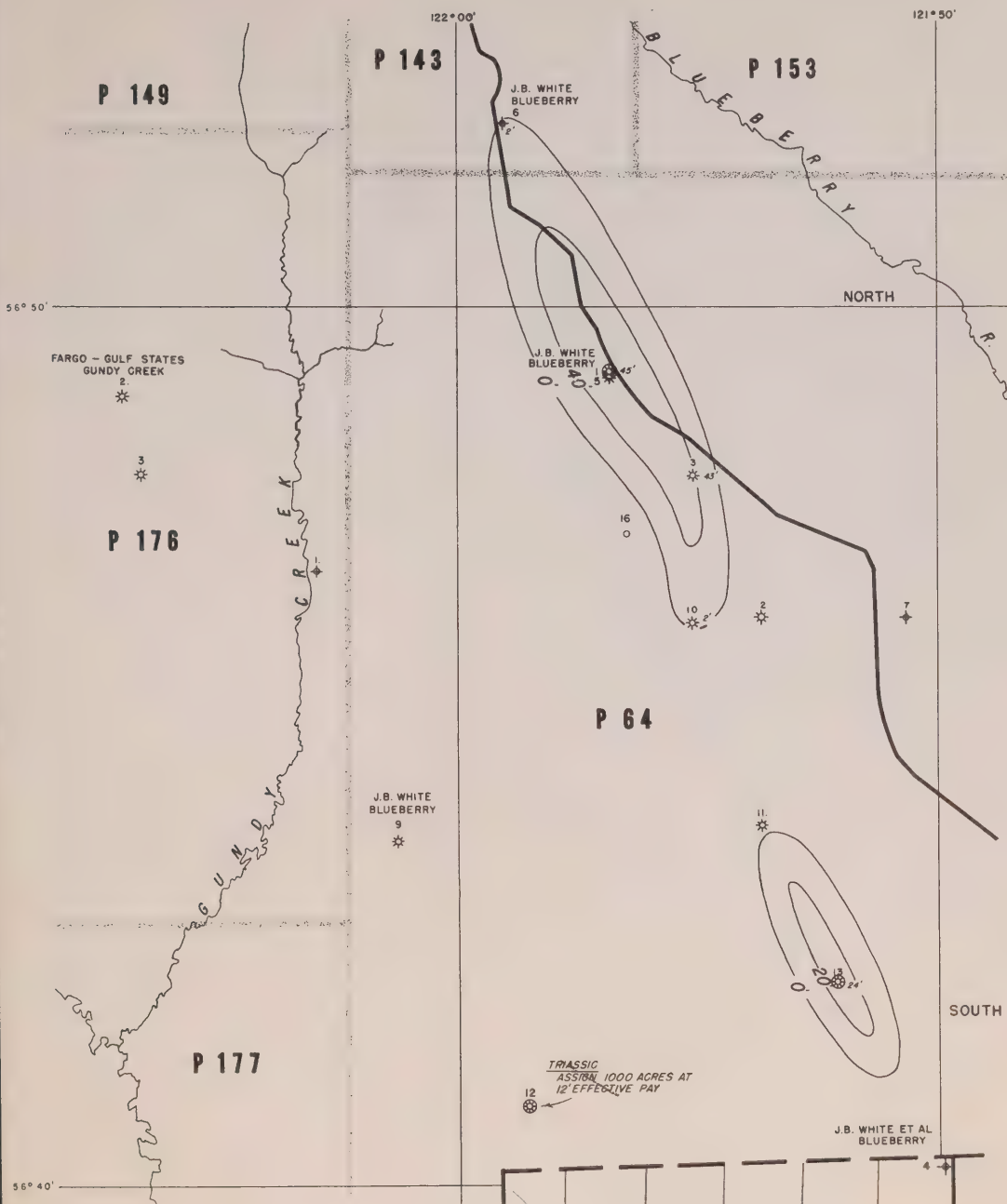
SCALE IN MILES

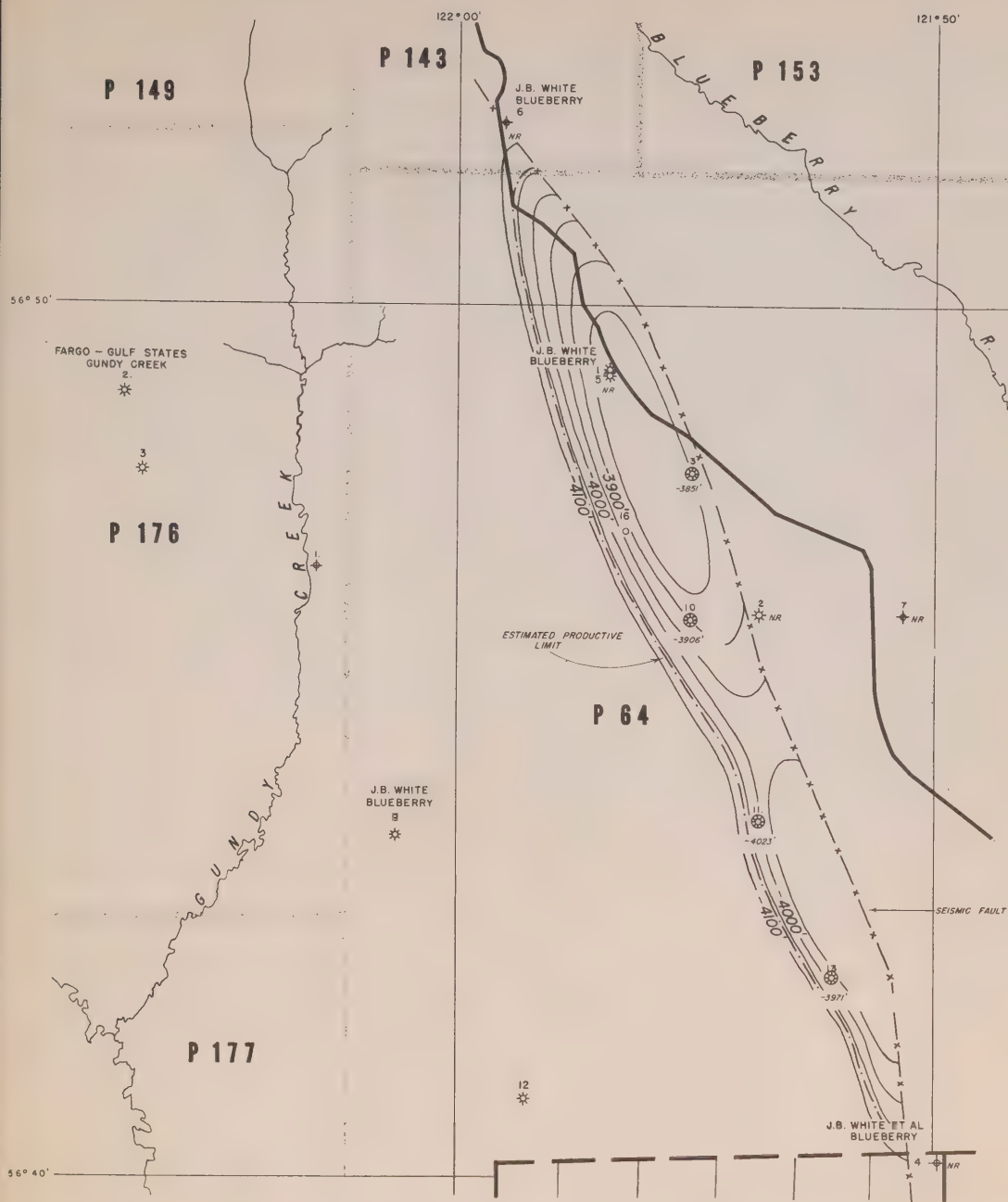


WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA





WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- + DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- X SUSPENDED WELL
- PRINCIPAL ROADS

BLUEBERRY MT. AREA BRITISH COLUMBIA

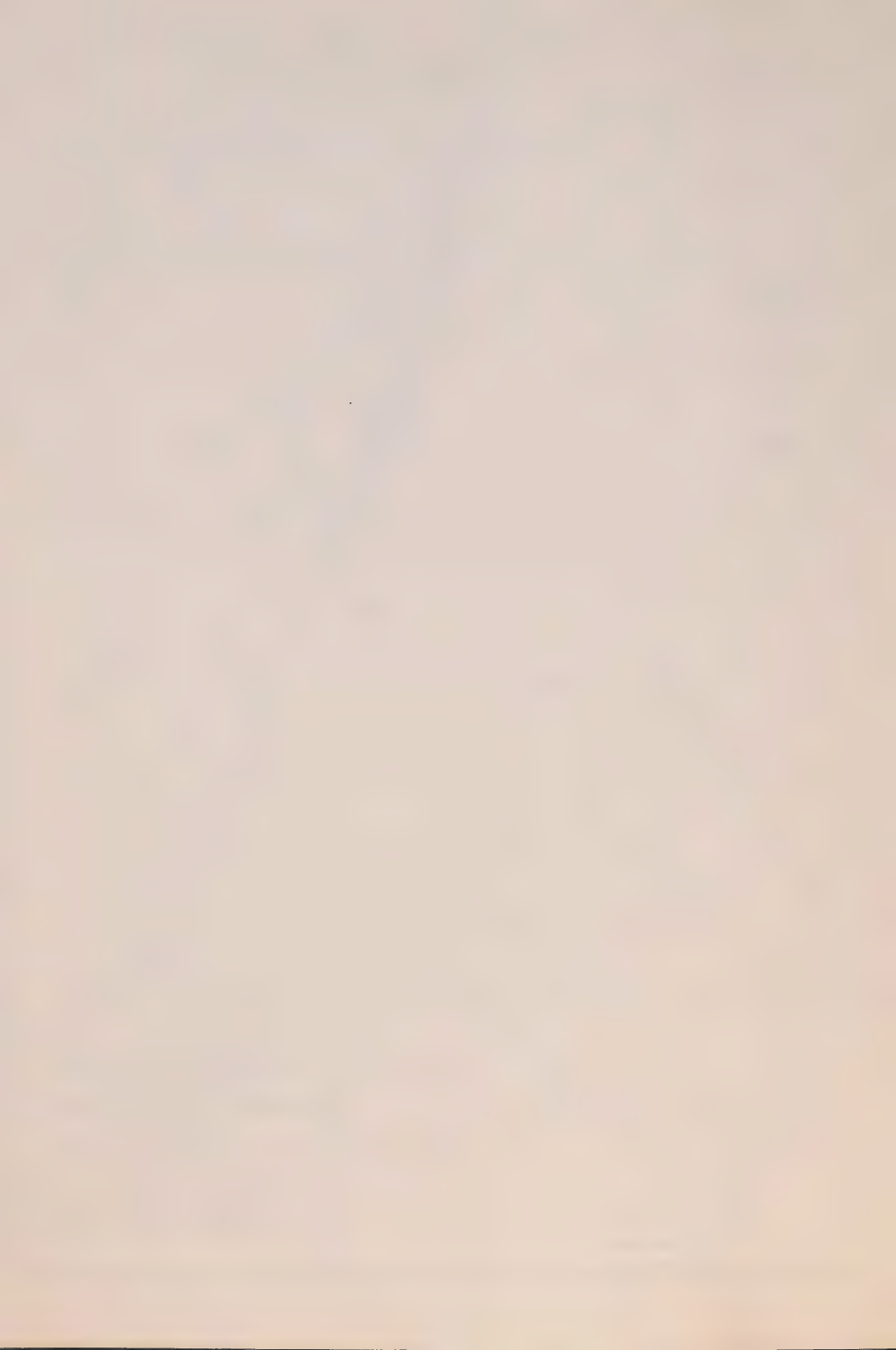
STRUCTURE MAP
CONTOURS ON TOP OF MISSISSIPPIAN

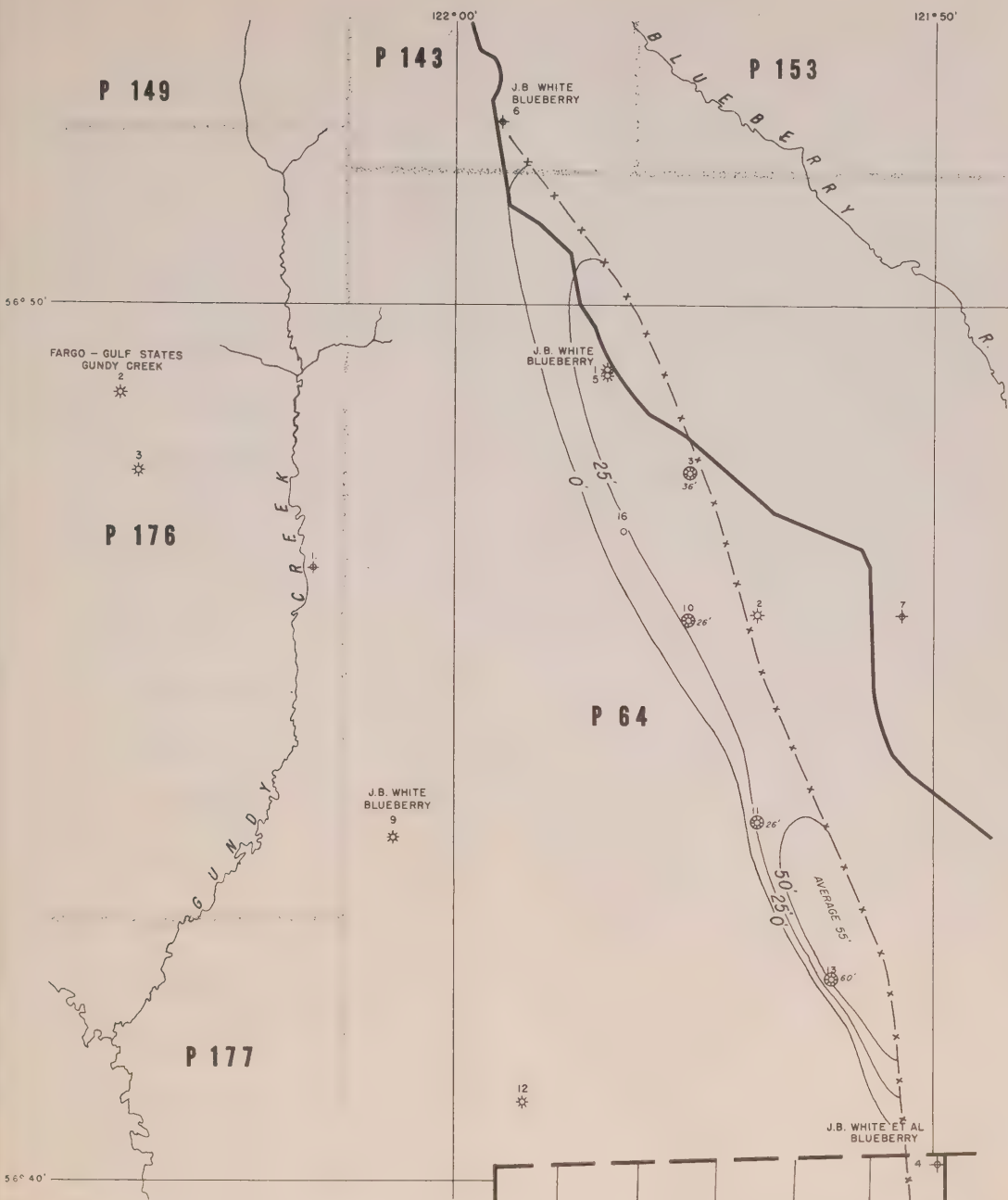
SCALE IN MILES . 1 1/2 0 2 3

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA





-LEGEND-

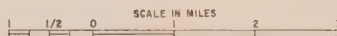
- ★ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

BLUEBERRY MT. AREA

BRITISH COLUMBIA

ISOPACHOUS MAP

MISSISSIPPIAN



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

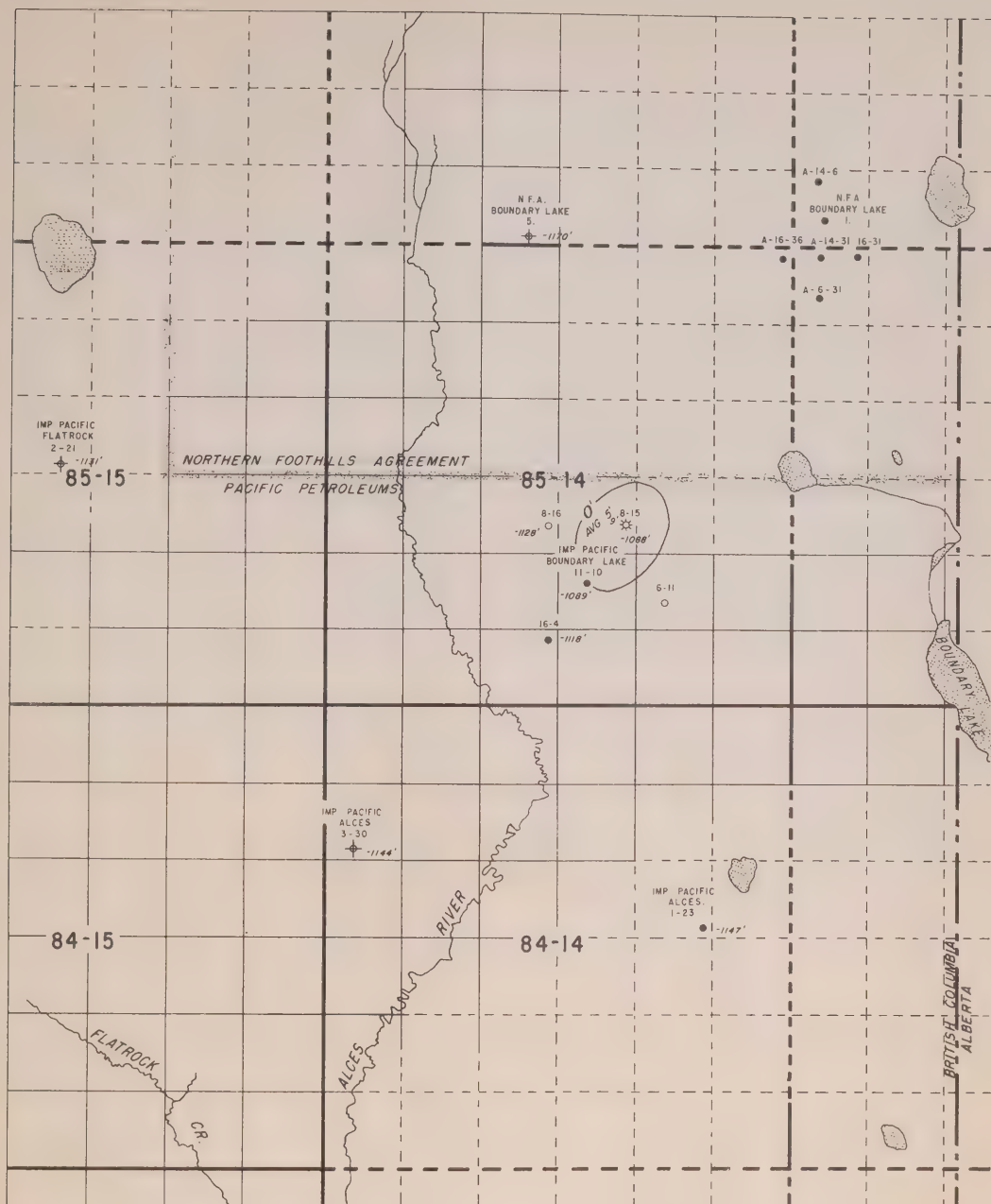
CALGARY, ALTA

BOUNDARY LAKE FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	UPPER GETHING	MIDDLE GETHING	Well # 16 - 4	CADOMIN	TRIASSIC "D"	TOTAL FIELD	TOTAL DEDICATED
			LOWER GETHING				
2. Geologic Age	L.Cretaceous	L.Cretaceous	L.Cretaceous	L.Cretaceous	Triassic		
3. Average Depth, Feet	3,580	3,640	3,550	3,770	4,490		
4. Completed Gas Wells	0	0	0	0	1		
5. Proved Area, Acres	824	1,382	640	3,808	2,054		
6. Average Pay Thickness, Feet	5.0	16.9	10.0	10.0	9.8		
7. Acre - Feet	4,121	23,361	6,400	38,000	20,131		
8. Average Porosity, Per Cent	17.0(E)	17.0	17.0(E)	16.6	10.0(E)		
9. Average Connate Water, Per Cent	35	35	35	35	30		
10. Initial Reservoir Pressure, psia	1,312	1,372	1,412	1,432	1,782		
11. Reservoir Temperature, Degrees R.	571	573	574	575	585		
12. Specific Gravity of Gas	.637(E)	.637	.635	.634(E)	.821(E)		
13. Gas Deviation Factor	.845	.840	.839	.838	.688		
14. Original Gas in Place, Mcf/Ac.Ft.	462	484	498	493	477		
15. Original Gas in Place, MMcf	1,904	11,307	3,187	18,734	9,602	44,734	36,797
16. Recovery Factor, Per Cent	85	85	85	85	85		
17. Original Recoverable Gas, MMcf	1,618	9,611	2,709	15,924	8,162	38,024	31,277
18. Shrinkage, Fuel, etc., Per Cent	7.5(E)	7.5	7.0	8.5(E)	14.0(E)		
19. Pipeline Gas Reserve, MMcf	1,497	8,890	2,519	14,570	7,019	34,495	28,466
20. % Dedicated to Westcoast	100	100	100	74.04	67.99		

Operating Company: Pacific Petroleum Ltd.



WEST OF SIXTH MERIDIAN

-LEGEND-

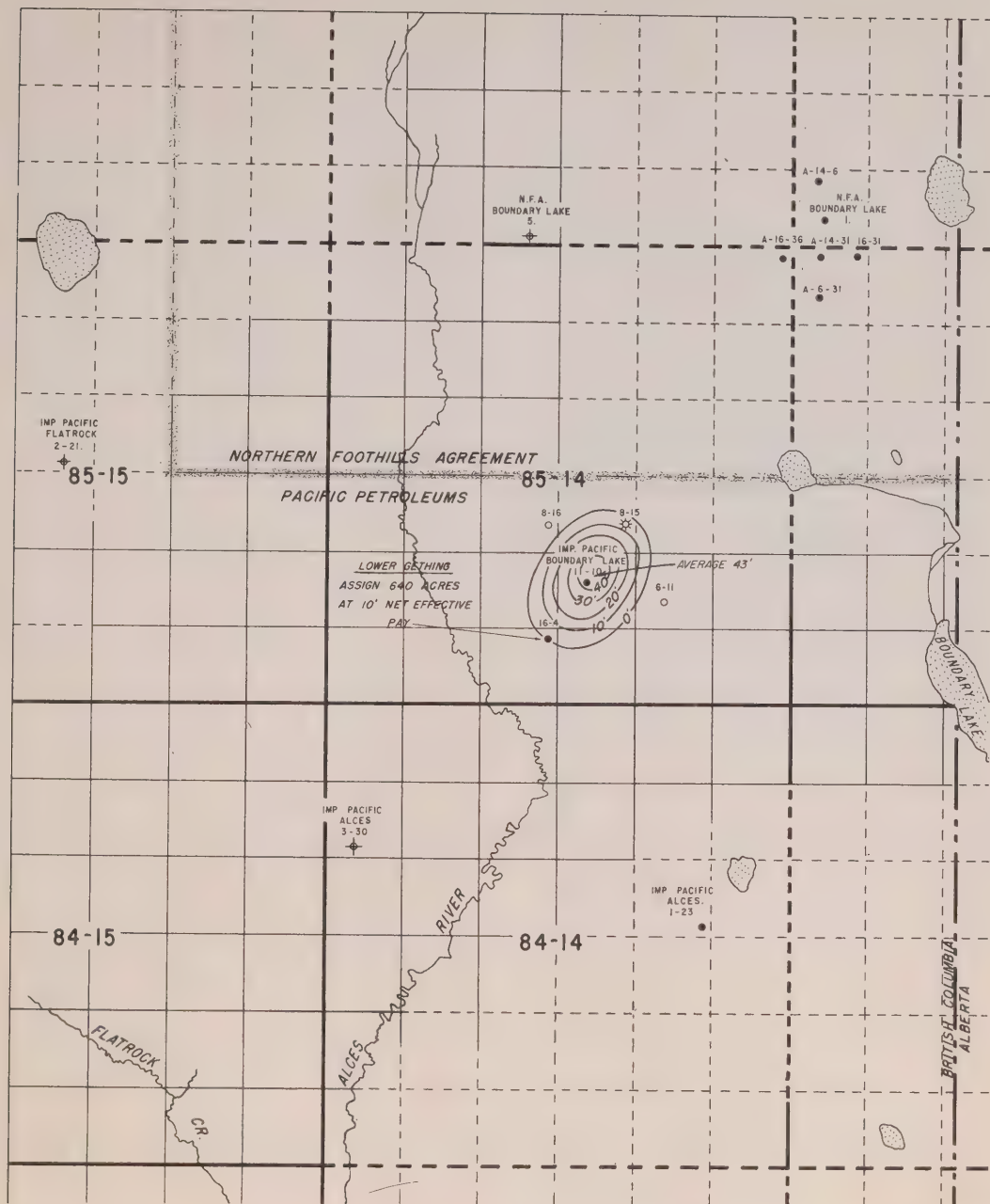
- ✱ GAS WELL
- OIL WELL
- ✚ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⚡ SUSPENDED WELL
- PRINCIPAL

BOUNDARY LAKE AREA
BRITISH COLUMBIAISOPACHOUS MAP
UPPER GETHING SANDSTONE

WESTCOAST TRANSMISSION CO.







SEPTEMBER 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

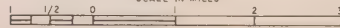
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-  OIL WELL
-  DRY & ABANDONED
-  COMPLETED WELL IN THIS ZONE
-  SUSPENDED WELL
-  PRINCIPAL

BOUNDARY LAKE AREA
BRITISH COLUMBIA

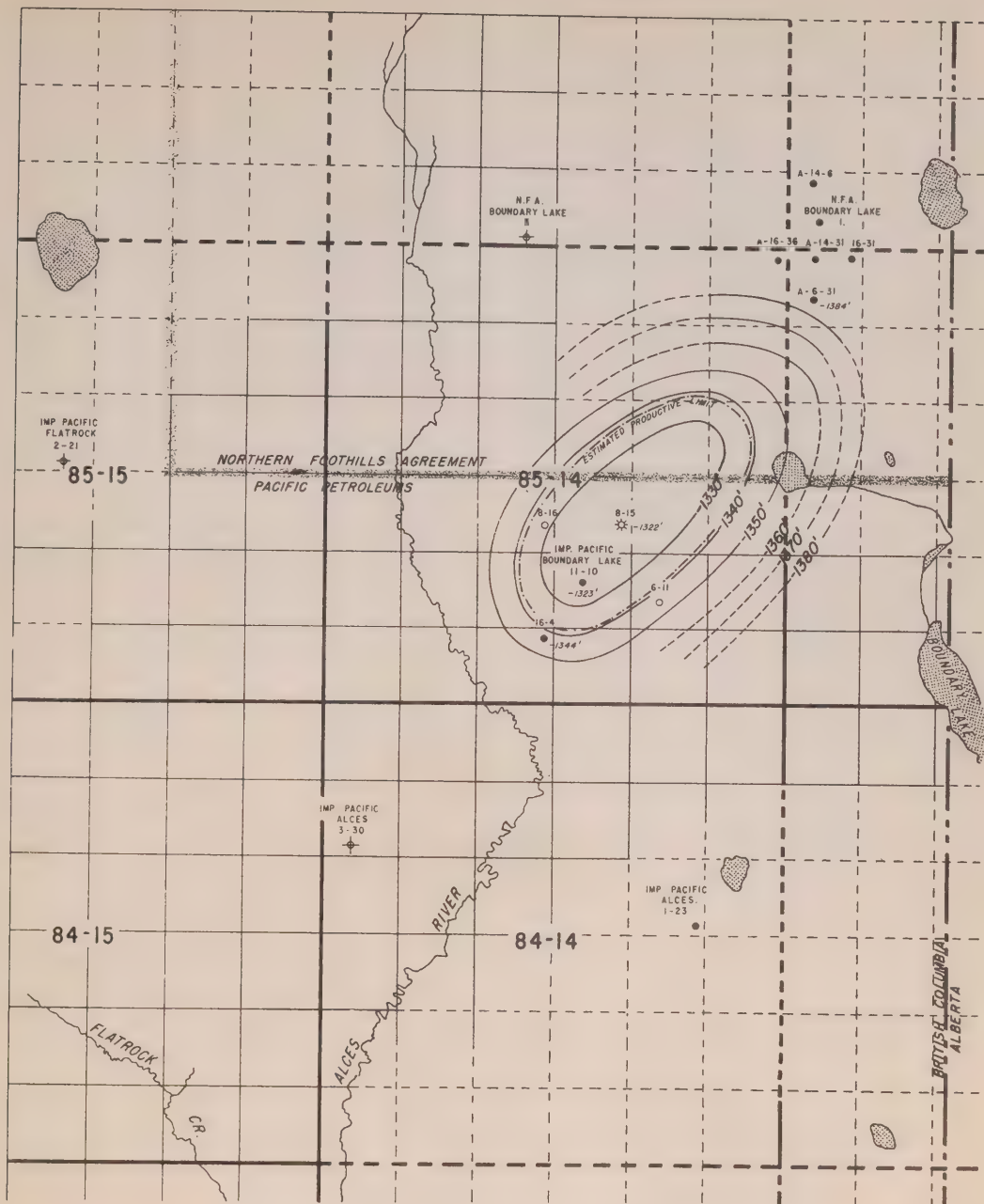
ISOPACHOUS MAP
MIDDLE GETTING SANDSTONE

SCALE IN MILES



WESTCOAST TRANSMISSION CO.

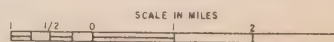
CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

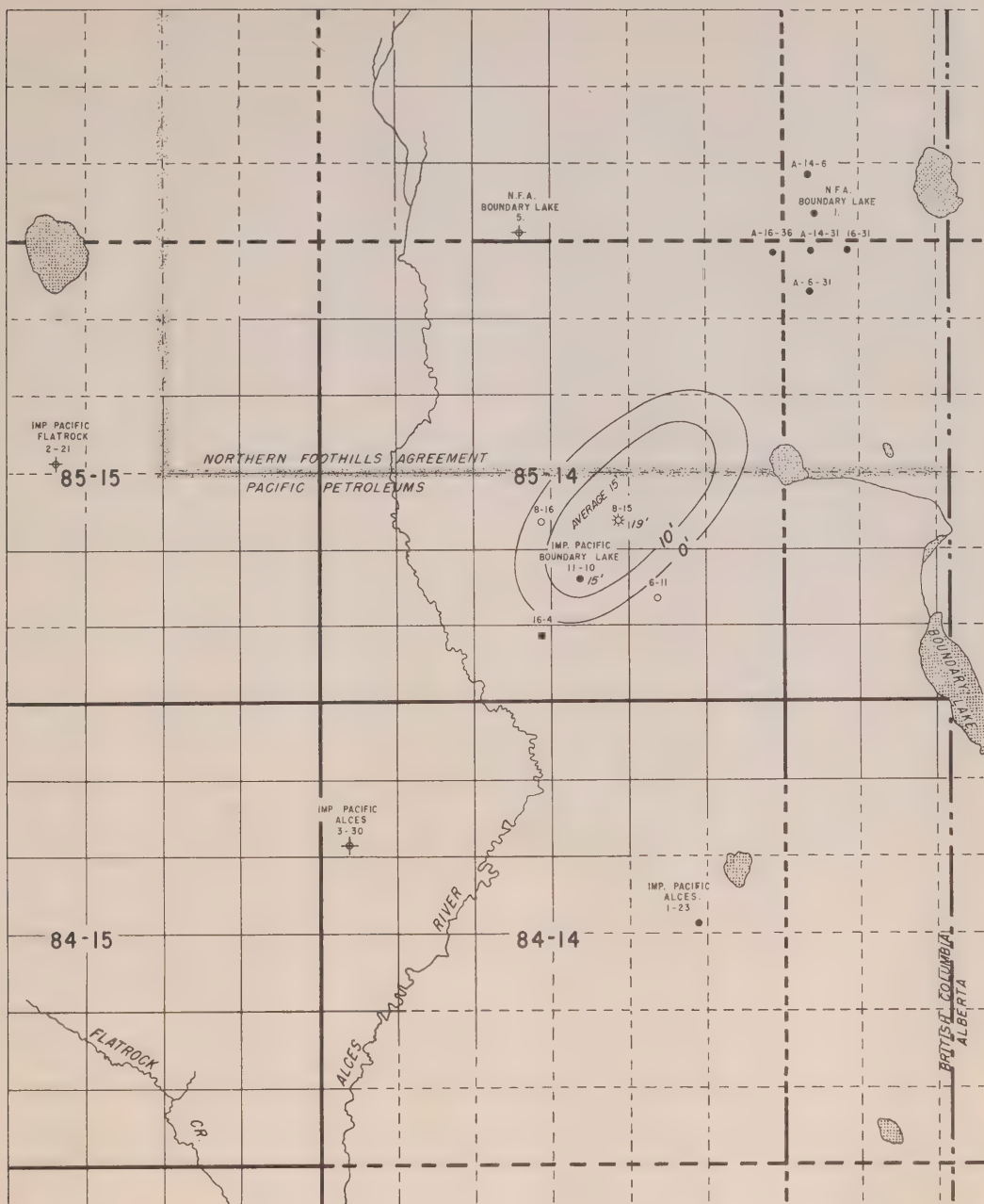
- ✱ GAS WELL
- OIL WELL
- ✚ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL

BOUNDARY LAKE AREA
BRITISH COLUMBIASTRUCTURE MAP
CONTOURS ON TOP OF CADOMIN SANDSTONE

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

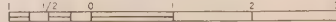
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- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL

BOUNDARY LAKE AREA BRITISH COLUMBIA

ISOPACHOUS MAP
CADOMIN SANDSTONE

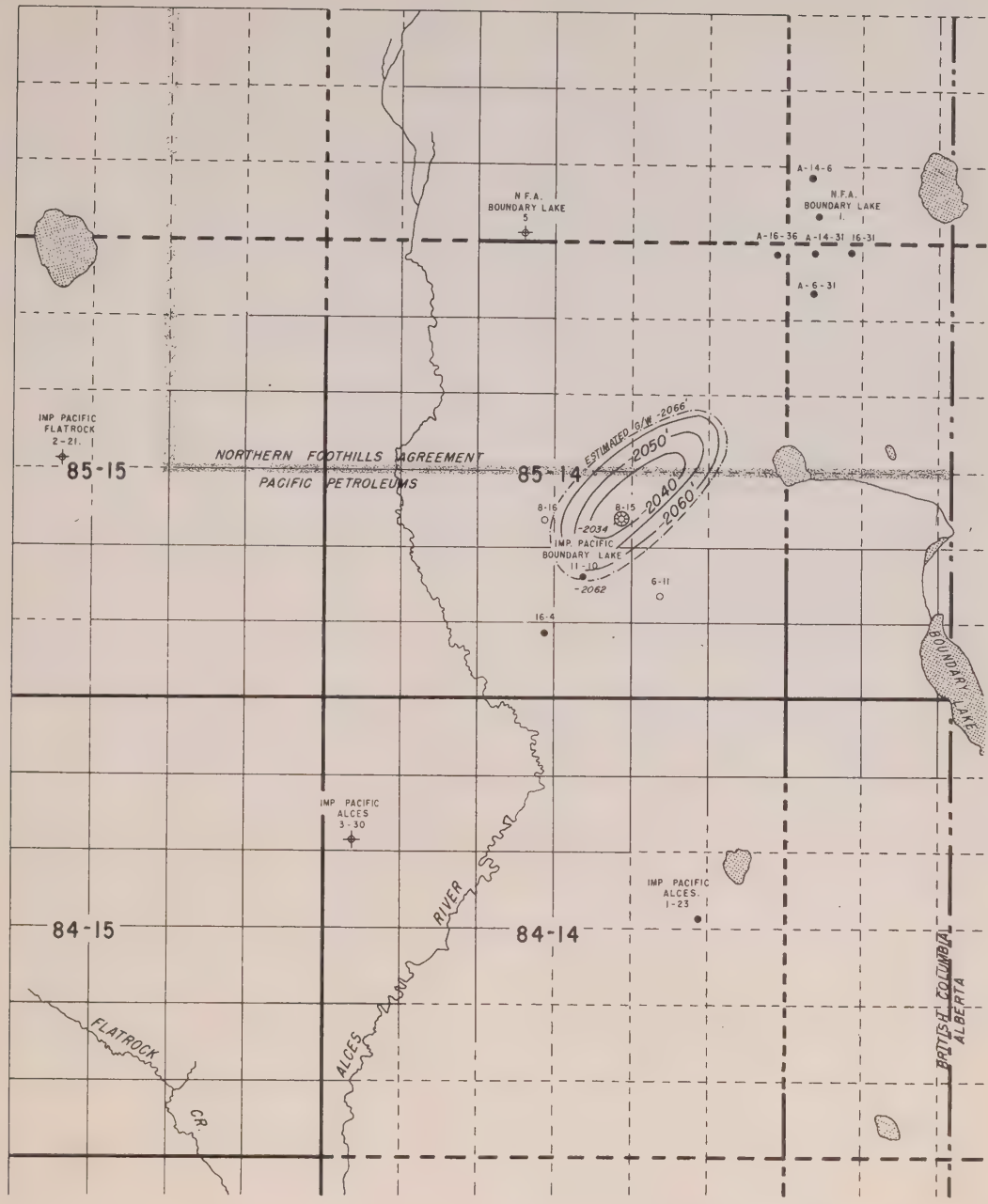
SCALE IN MILES



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



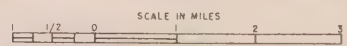
WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL

BOUNDARY LAKE AREA
BRITISH COLUMBIA

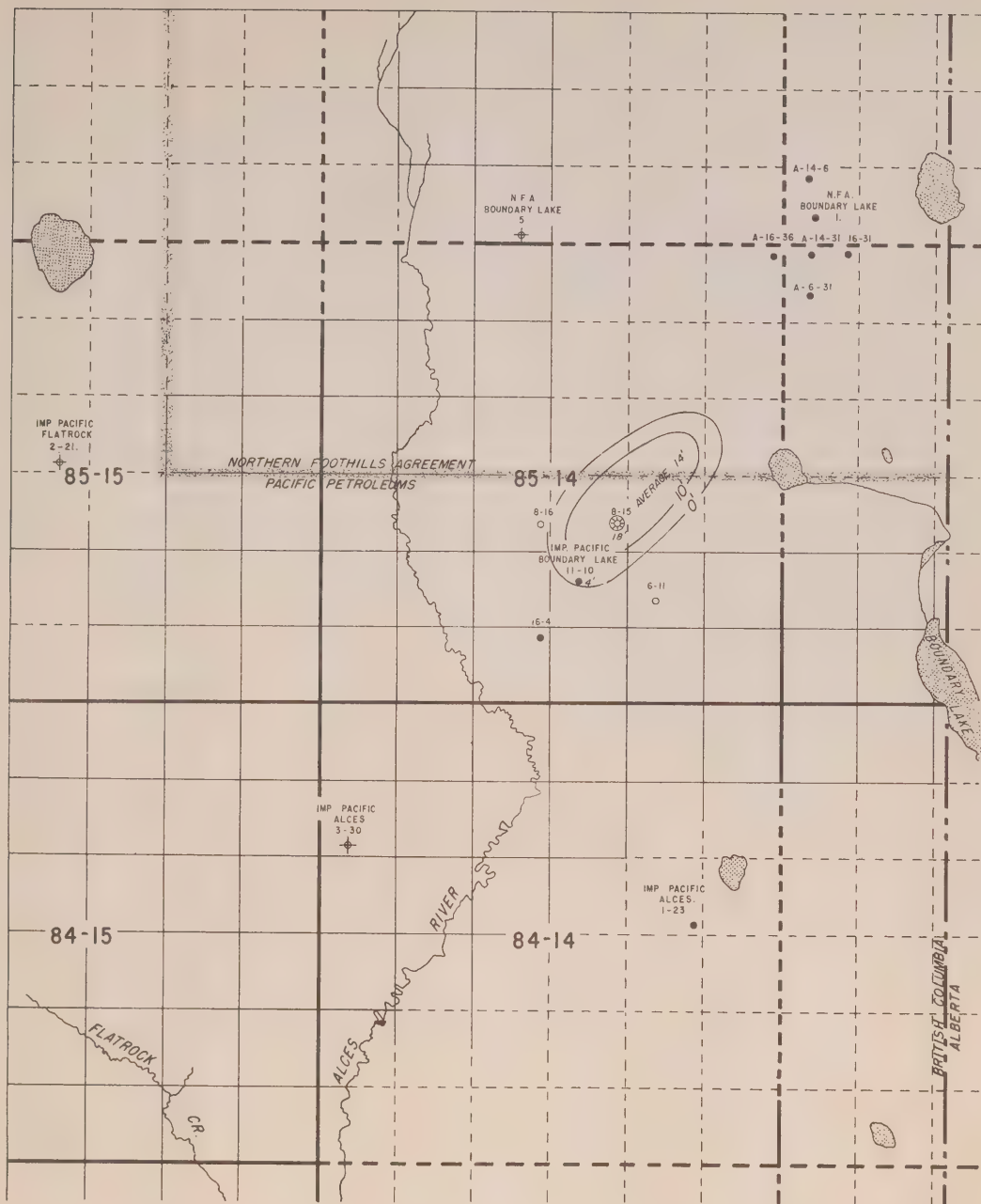
STRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC "D"



WESTCOAST TRANSMISSION CO.






SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

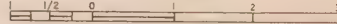
-LEGEND-

- | | |
|---|-----------------------------|
|  | GAS WELL |
|  | OIL WELL |
|  | DRY & ABANDONED |
|  | COMPLETED WELL IN THIS ZONE |
|  | SUSPENDED WELL |

BOUNDARY LAKE AREA
BRITISH COLUMBIA

ISOPACHOUS MAP
TRIASSIC "D"

SCALE IN MILES



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA

FORT ST. JOHN FIELD

BRITISH COLUMBIA, CANADA

ESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	CADOMIN	"A" ZONE	"B" ZONE	Wells #23 & 30 "C" ZONE	Well #9 "C" ZONE	Well #8 "C" ZONE	"D" ZONE
2. Geologic Age	L. Cretaceous	Triassic	Triassic	Triassic	Triassic	Triassic	Triassic
3. Average Depth, Feet	3,100	3,800	3,840	4,415	4,405	4,500	4,800
4. Completed Gas Wells	2	14	6	0	0	0	8
5. Proved Area, Acres	5,102	25,513	12,603	1,000	640	1,500	15,315
6. Average Pay Thickness, Feet	10.5	19.1	19.4	10.0	10.0	10.0	18.8
7. Acre - Feet	53,455	486,330	244,175	10,000	6,400	15,000	287,388
8. Average Porosity, Per Cent	12.9	12.5	7.5	15.0	15.0	15.0	10.8
9. Average Connate Water, Per Cent	40	20	20	30	30	30	25
10. Initial Reservoir Pressure, psia	1,320	1,592	1,612	1,890	1,890	1,850	2,022
11. Reservoir Temperature, Degrees R.	569	579	580	588	590	592	594
12. Specific Gravity of Gas	.608	.667	.667	.676	.676	.676	.678
13. Gas Deviation Factor	.858	.810	.810	.798	.805	.803	.798
14. Original Gas in Place, Mcf/Ac. Ft.	322	522	317	650	643	628	531
15. Original Gas in Place, MMcf	17,213	253,864	77,403	6,500	4,115	9,420	152,603
16. Recovery Factor, Per Cent	75	85	75	85	85	85	85
17. Original Recoverable Gas, MMcf	12,910	215,784	58,052	5,525	3,498	8,007	129,713
18. Shrinkage, Fuel, etc., Per Cent	7.5	14.5	14.5	5.0	5.0	11.0	12.0
19. Pipeline Gas Reserve, MMcf	11,942	184,495	49,634	5,249	3,231	7,126	114,147

Operating Company: Pacific Petroleum Ltd.

FORT ST. JOHN FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	PERMO-PENN	CHESTER	TOTAL FIELD
2. Geologic Age	Permo-Penn	Mississippian	
3. Average Depth, Feet	6,250	6,950	
4. Completed Gas Wells	3	0	
5. Proved Area, Acres	7,710	1,000	
6. Average Pay Thickness, Feet	27.1	10.0	
7. Acre - Feet	209,135	10,000	
8. Average Porosity, Per Cent	10.0	5.0	
9. Average Connate Water, Per Cent	25	15	
10. Initial Reservoir Pressure, psia	2,792	3,000	
11. Reservoir Temperature, Degrees R.	617	625	
12. Specific Gravity of Gas	.693	.650	
13. Gas Deviation Factor	.818	.856	
14. Original Gas in Place, Mcf/Ac.Ft.	638	366	
15. Original Gas in Place, MMcf	133,428	3,660	658,206
16. Recovery Factor, Per Cent	85	85	
17. Original Recoverable Gas, MMcf	113,414	3,111	550,014
18. Shrinkage, Fuel, etc., Per Cent	10.0	12.0	
19. Pipeline Gas Reserve, MMcf	102,073	2,738	480,635

Operating Company: Pacific Petroleum Ltd.

S. E. FORT ST. JOHN FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	CADOMIN	"A" ZONE	"B" ZONE	"D" ZONE	PERMO-PENN	Well #37	TOTAL FIELD
						PERMO-PENN	
2. Geologic Age	L. Cretaceous	Triassic	Triassic	Triassic	Permo-Penn	Permo-Penn	
3. Average Depth, Feet	3,150	3,850	3,890	4,875	6,320	6,310	
4. Completed Gas Wells	1	2	0	4	7	1	
5. Proved Area, Acres	2,766	7,601	1,871	7,477	6,524	1,000	
6. Average Pay Thickness, Feet	12.5	15.7	7.3	20.6	14.7	9.0	
7. Acre - Feet	34,715	119,713	13,702	154,024	95,628	9,000	
8. Average Porosity, Per Cent	15.4	14.5	9.9	9.6	9.8	8.0 (E)	
9. Average Connate Water, Per Cent	40	20	20	25	25	25	
10. Initial Reservoir Pressure, psia	1,332	1,652	1,672	2,092	2,842	2,880	
11. Reservoir Temperature, Degrees R.	570	581	582	597	618	620	
12. Specific Gravity of Gas	.608	.667	.667	.687	.618	.618 (E)	
13. Gas Deviation Factor	.855	.802	.811	.798	.851	.851	
14. Original Gas in Place, Mcf/Ac. Ft.	388	632	431	486	611	504	
15. Original Gas in Place, MMcf	13,469	75,659	5,906	74,856	58,429	4,536	232,855
16. Recovery Factor, Per Cent	75	85	75	85	85	75	
17. Original Recoverable Gas, MMcf	10,102	64,310	4,430	63,628	49,665	3,402	195,537
18. Shrinkage, Fuel, etc., Per Cent	7.5	14.5	14.5	12.0	7.0	7.0	
19. Pipeline Gas Reserve, MMcf	9,344	54,985	3,788	55,993	46,188	3,164	173,462

Operating Company: Pacific Petroleum Ltd.

AIRPORT FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60°F

1. Reservoir	GETHING	CADOMIN	"A" ZONE	"C" ZONE	"D" ZONE	TOTAL FIELD
2. Geologic Age	L. Cretaceous	L. Cretaceous	Triassic	Triassic	Triassic	
3. Average Depth, Feet	3,275	3,610	4,140	4,660	5,060	
4. Completed Gas Wells	0	1	0	0	1	
5. Proved Area, Acres	640	928	5,014	1,000	3,572	
6. Average Pay Thickness, Feet	10.0	12.8	15.9	7.0	10.6	
7. Acre - Feet	6,400	11,926	79,586	7,000	37,995	
8. Average Porosity, Per Cent	20.0	12.8	12.0	10.0	8.5	
9. Average Connate Water, Per Cent	35	40	20	35	30	
10. Initial Reservoir Pressure, psia	1,270	1,450	1,652	1,870	2,032	
11. Reservoir Temperature, Degrees R.	564	573	581	586	595	
12. Specific Gravity of Gas	.620	.634	.667 (E)	.676	.653	
13. Gas Deviation Factor	.848	.836	.810	.802	.819	
14. Original Gas in Place, Mcf/Ac.Ft.	531	357	518	398	382	
15. Original Gas in Place, MMcf	3,396	4,258	41,222	2,786	14,514	66,176
16. Recovery Factor, Per Cent	75	75	85	85	85	
17. Original Recoverable Gas, MMcf	2,547	3,194	35,039	2,368	12,337	55,485
18. Shrinkage, Fuel, etc., Per Cent	5.0	8.5	14.5 (E)	7.0	9.5	
19. Pipeline Gas Reserve, MMcf	2,420	2,923	29,958	2,202	11,165	48,668

Operating Company: Pacific Petroleum Ltd.

CHARLIE LAKE FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

	"A" ZONE	"B" ZONE	"D" ZONE	TOTAL FIELD
1. Reservoir	Triassic	Triassic	Triassic	
2. Geologic Age	Triassic	Triassic	Triassic	
3. Average Depth, Feet	3,860	3,925	4,920	
4. Completed Gas Wells	1	1	0	
5. Proved Area, Acres	3,417	6,055	4,031	
6. Average Pay Thickness, Feet	10.0	12.8	8.5	
7. Acre - Feet	34,170	77,608	34,182	
8. Average Porosity, Per Cent	12.9	6.4	8.0 (E)	
9. Average Connate Water, Per Cent	20	20	30	
10. Initial Reservoir Pressure, psia	1,582	1,585	1,982	
11. Reservoir Temperature, Degrees R.	579	580	593	
12. Specific Gravity of Gas	.699	.670	.659	
13. Gas Deviation Factor	.795	.810	.816	
14. Original Gas in Place, Mcf/Ac.Ft.	545	266	353	
15. Original Gas in Place, MMcf	18,622	20,644	12,066	51,332
16. Recovery Factor, Per Cent	85	75	85	
17. Original Recoverable Gas, MMcf	15,829	15,483	10,256	41,568
18. Shrinkage, Fuel, etc., Per Cent	15.0	14.5	12.0	
19. Pipeline Gas Reserve, MMcf	13,455	13,238	9,025	35,718

Operating Company: Pacific Petroleum Ltd.

R 20

- LEGEND -
- ☒ GAS WELL
 - OIL WELL
 - ⊕ DRY & ABANDONED
 - ⊙ KNOWN LIES WELL IN THIS ZONE
 - ⌘ SUSPENDED WELL
 - CROWNED ROAD

R 19

R 18

R 17

FT. ST JOHN AREA
BRITISH COLUMBIA

STRUCTURE MAP
CONTOURS ON TOP OF CADOMIN SANDSTONE
SCALE IN FEET

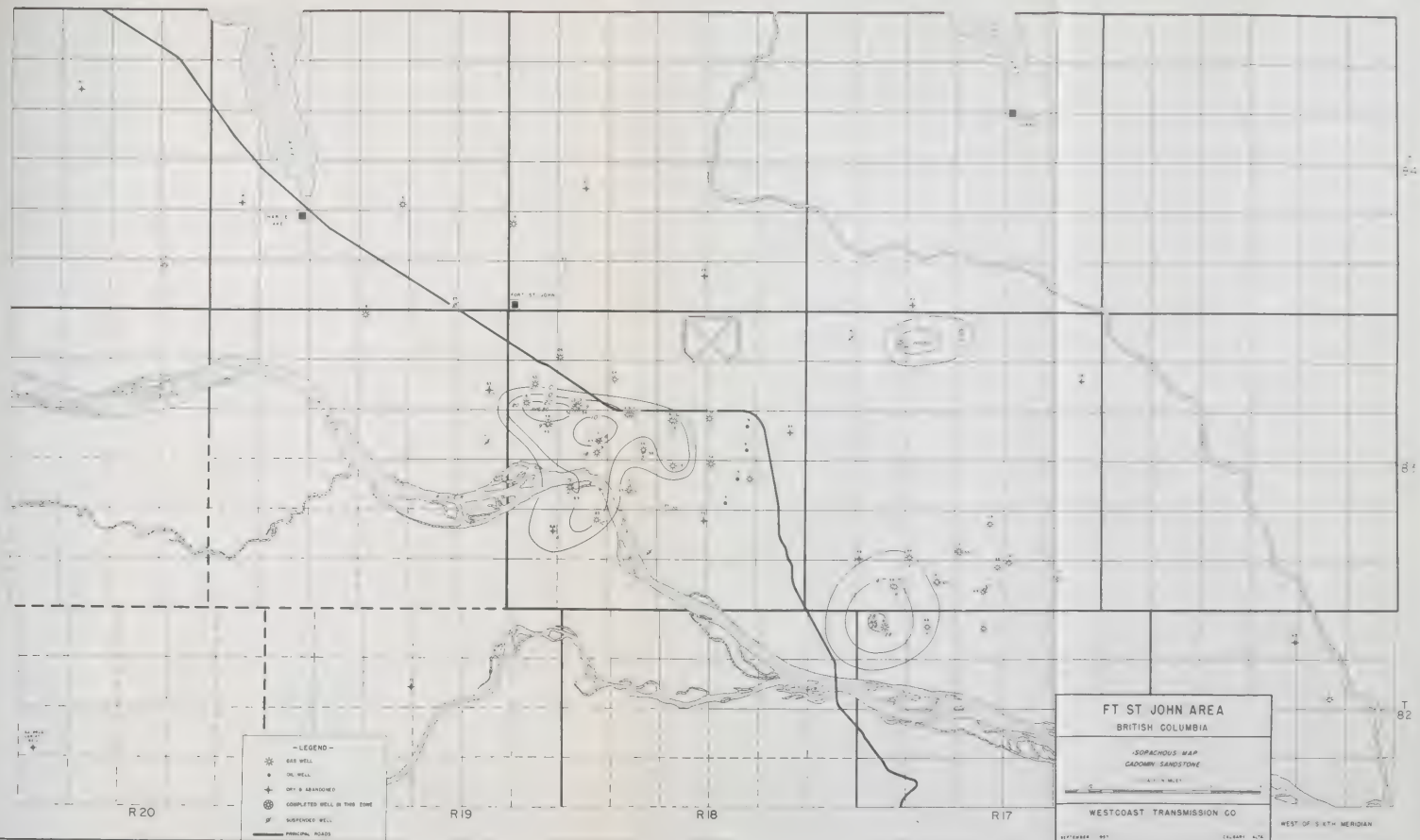
WESTCOAST TRANSMISSION CO.

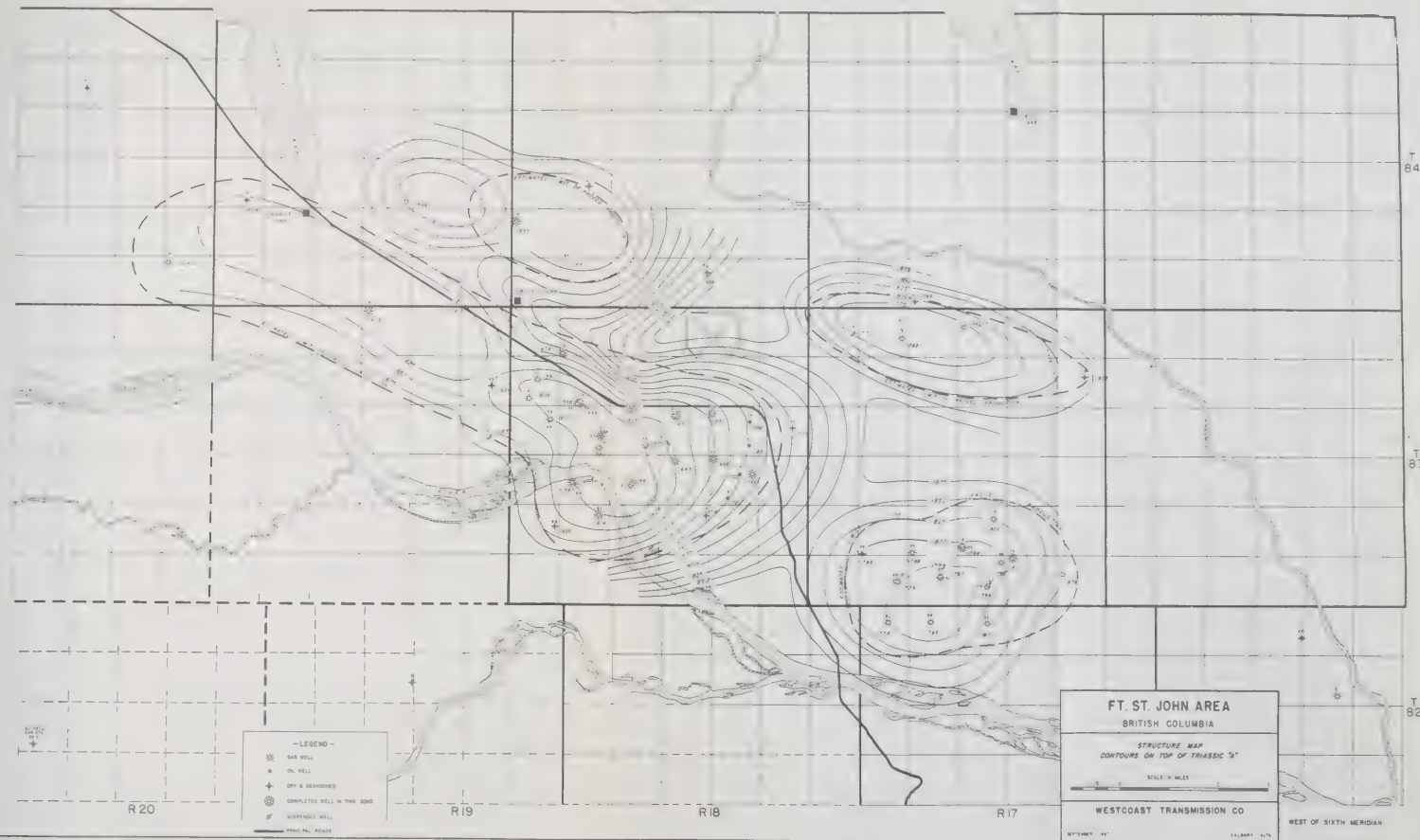
SEPTEMBER 1957

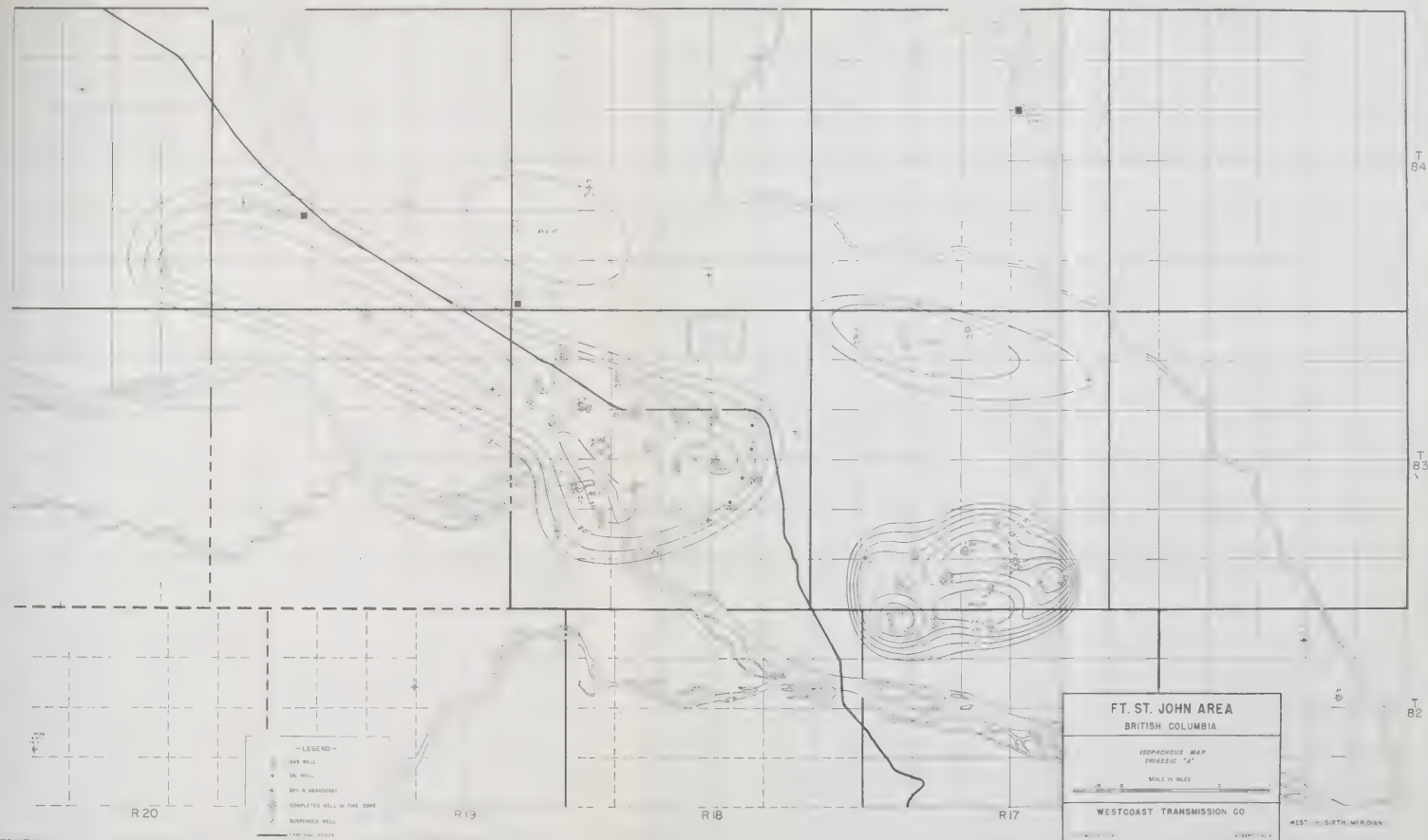
ST. JOHN, B.C.

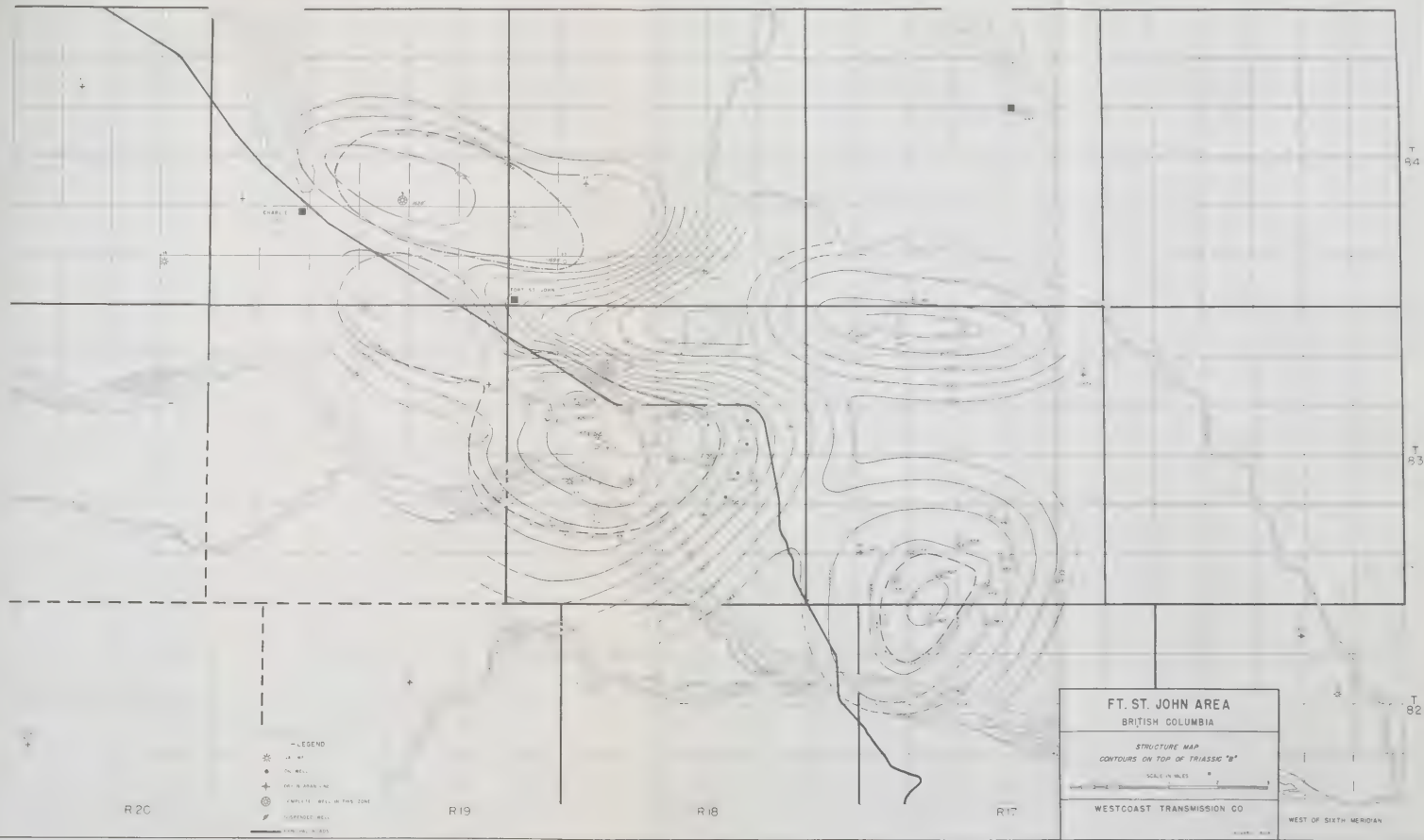
WEST OF SIXTH MERIDIAN

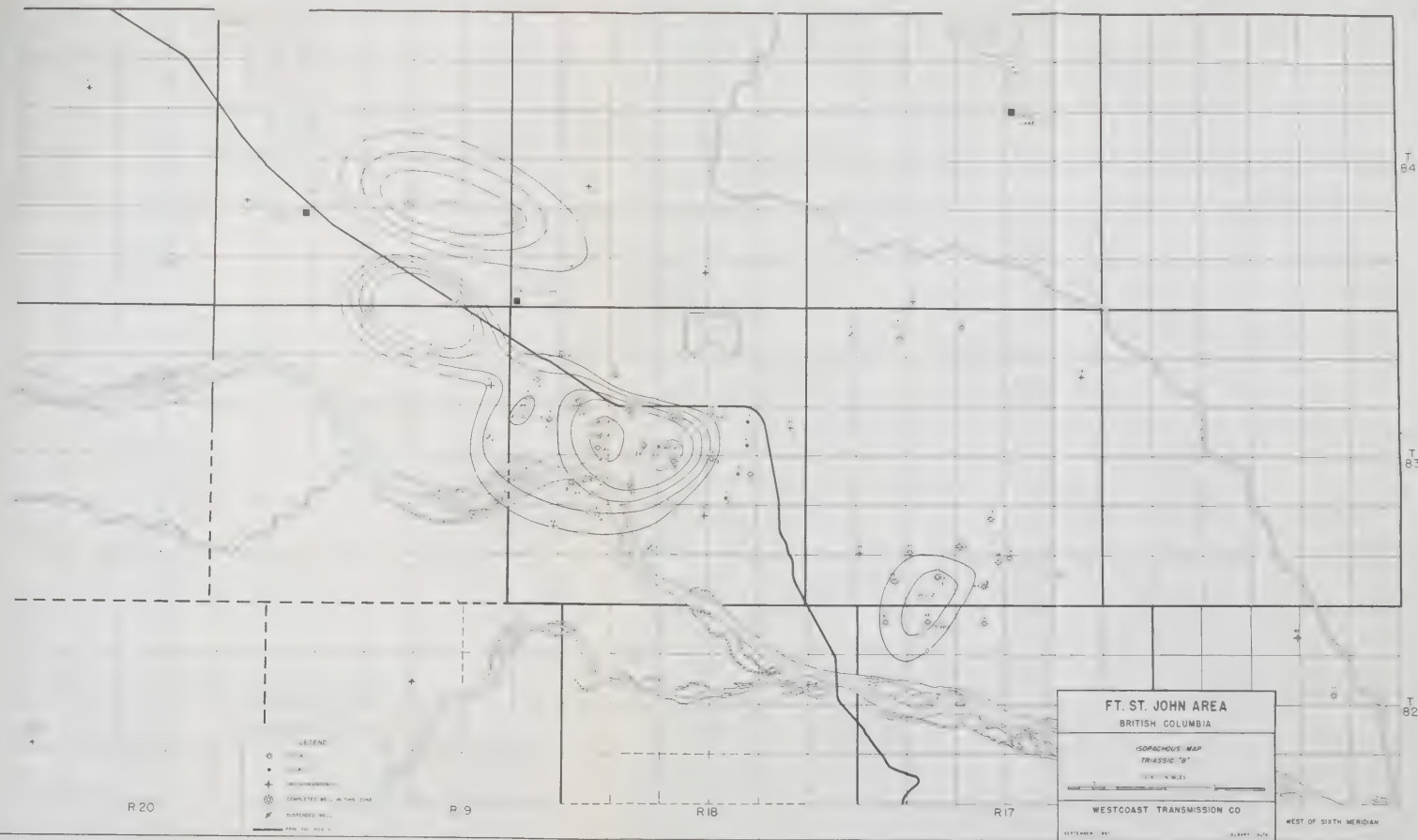
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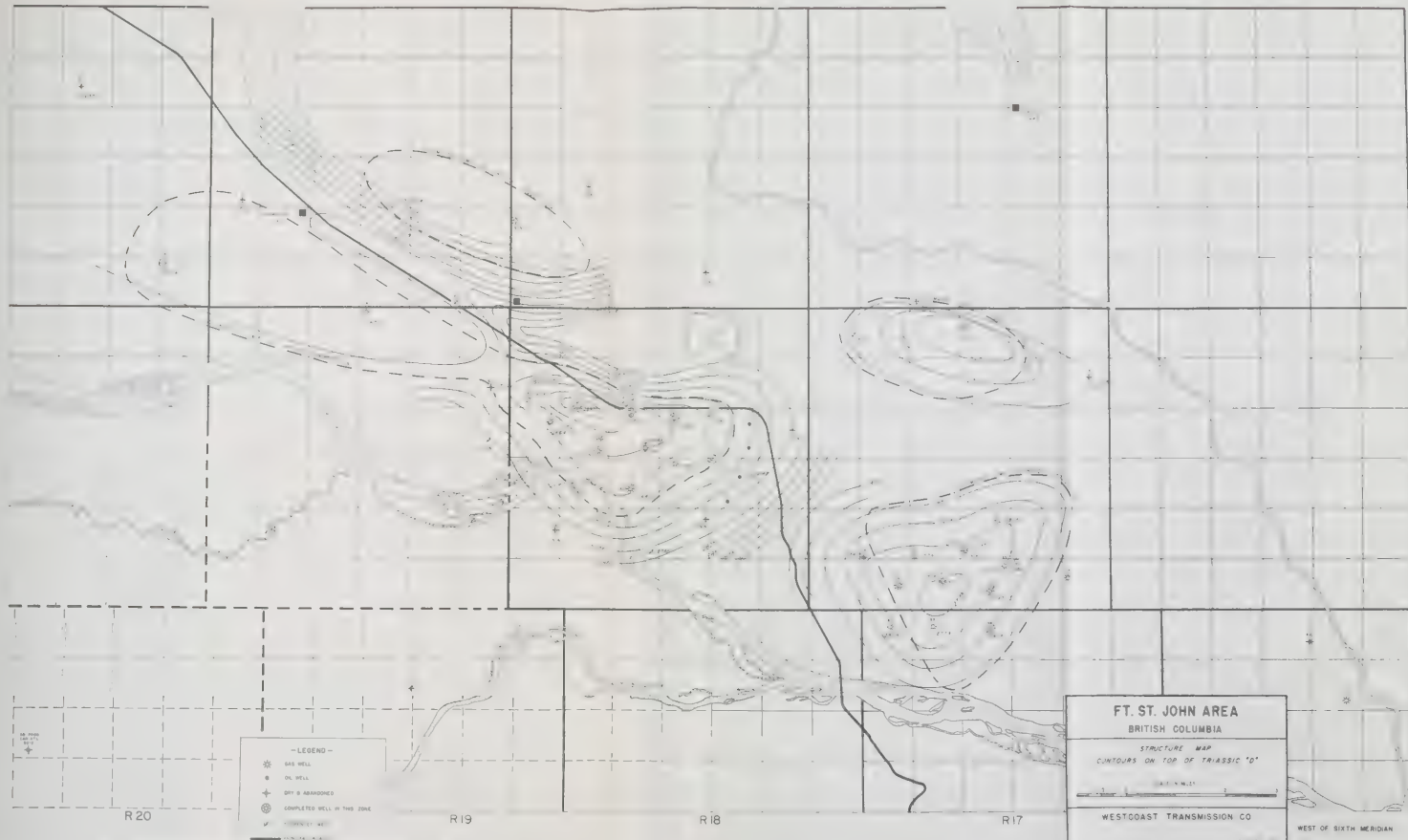










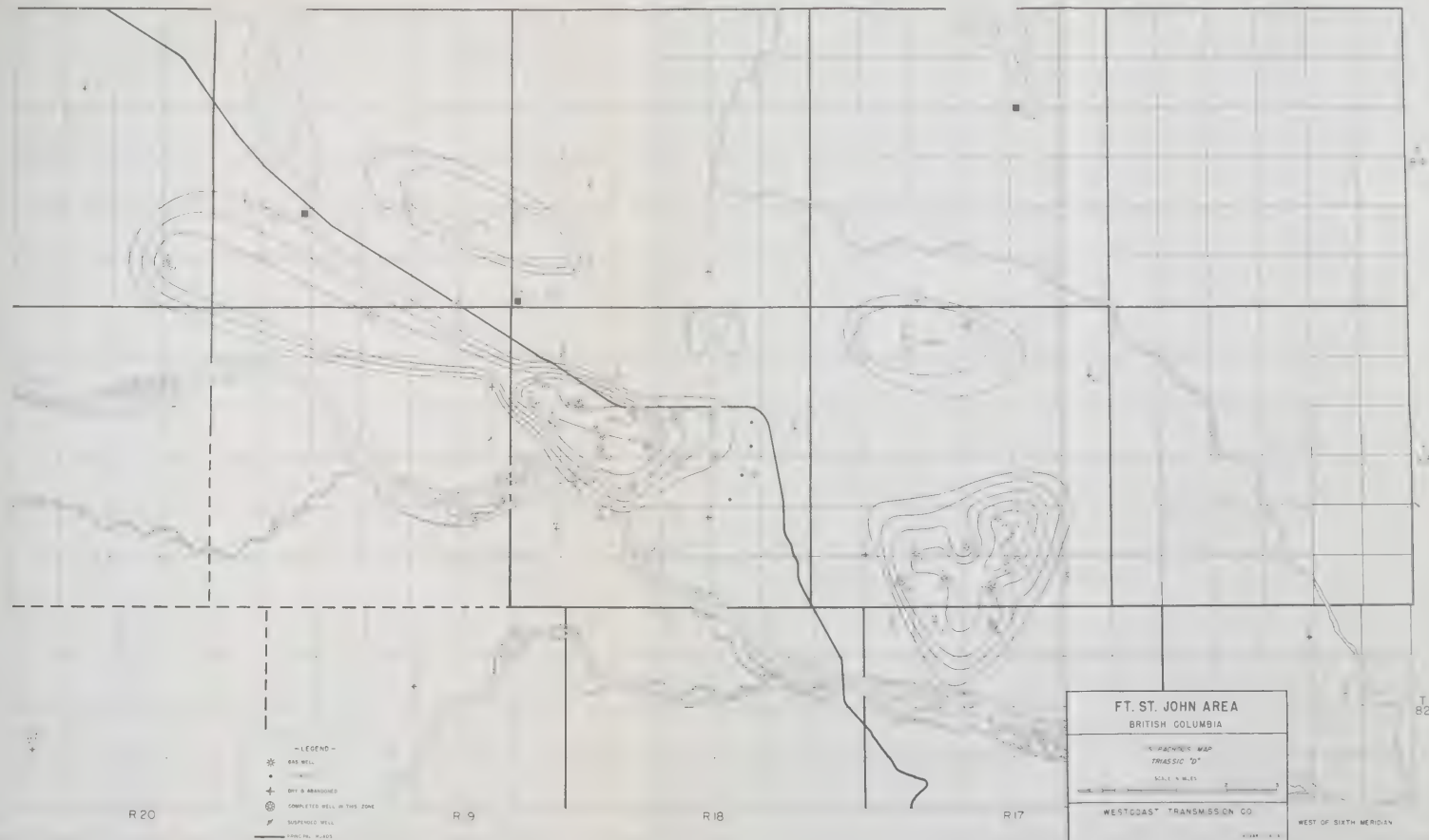


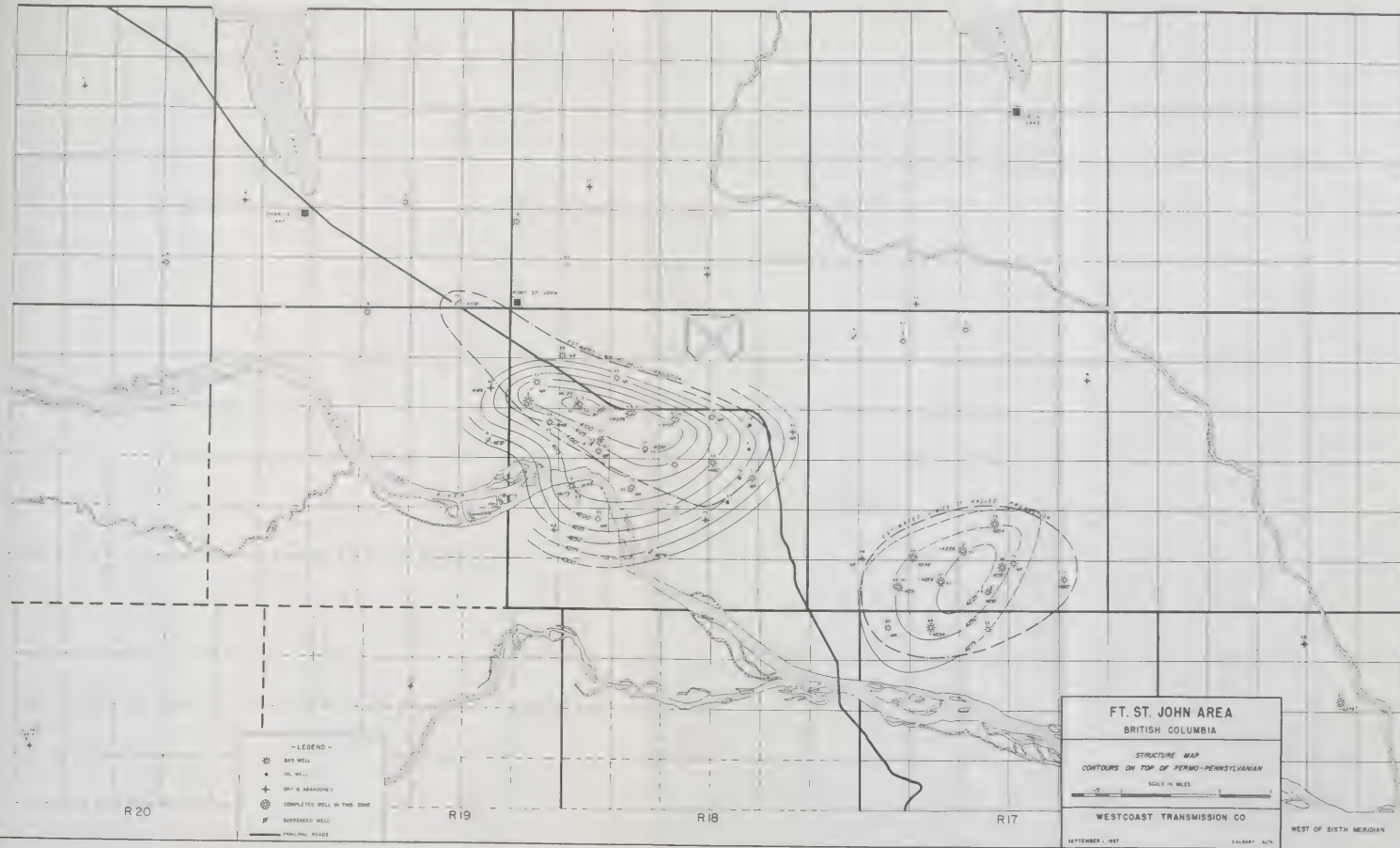
-LEGEND-

- ★ GAS WELL
- OIL WELL
- ✕ DRY HOLE
- ⊕ COMPLETED WELL IN THIS ZONE
- ⊙ COMPLETED WELL

CONTOUR IN FEET

FT. ST. JOHN AREA
BRITISH COLUMBIA
STRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC "D"
SCALE IN MILES
WESTCOAST TRANSMISSION CO.
WEST OF SIXTH MERIDIAN
TALBOT, B.C.





- LEGEND -
- ★ GAT WELL
 - ON WELL
 - + ON IN ABANDONED
 - ⊙ COMPLETED WELL IN THIS ZONE
 - ⊙ SUSPENDED WELL
 - PRINCIPAL ROAD

FT. ST. JOHN AREA
BRITISH COLUMBIA

STRUCTURE MAP
CONTOURS ON TOP OF PERMO-PENNSYLVANIAN

SCALE IN MILES

WESTCOAST TRANSMISSION CO

SEPTEMBER 1957

E.L. BART 6/78

WEST OF SIXTH MERIDIAN



GUNDY CREEK FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F

1. Reservoir	UPPER TRIASSIC	"D" ZONE	WELL #4	TOTAL FIELD
			UPPER TRIASSIC	
2. Geologic Age	Triassic	Triassic	Triassic	
3. Average Depth, Feet	5,067	5,600	4,155	
4. Completed Gas Wells	2	1	0	
5. Proved Area, Acres	2,000	1,000	2,000	
6. Average Pay Thickness, Feet	24.0	10.0	17.0	
7. Acre - Feet	48,000	10,000	34,000	
8. Average Porosity, Per Cent	11.4	10.0 (E)	10.0 (E)	
9. Average Connate Water, Per Cent	20	25	25	
10. Initial Reservoir Pressure, psia	1,751	2,362	1,763	
11. Reservoir Temperature, Degrees R.	600	608	584	
12. Specific Gravity of Gas	.668	.653	.670 (E)	
13. Gas Deviation Factor	.820	.820	.805	
14. Original Gas in Place, Mcf/Ac.Ft.	499	546	433	
15. Original Gas in Place, MMcf	23,952	5,460	14,722	44,134
16. Recovery Factor, Per Cent	85	85	85	
17. Original Recoverable Gas, MMcf	20,359	4,641	12,514	37,514
18. Shrinkage, Fuel, etc., Per Cent	12.0	8.0	12.0	
19. Pipeline Gas Reserve, MMcf	17,916	4,270	11,012	33,198

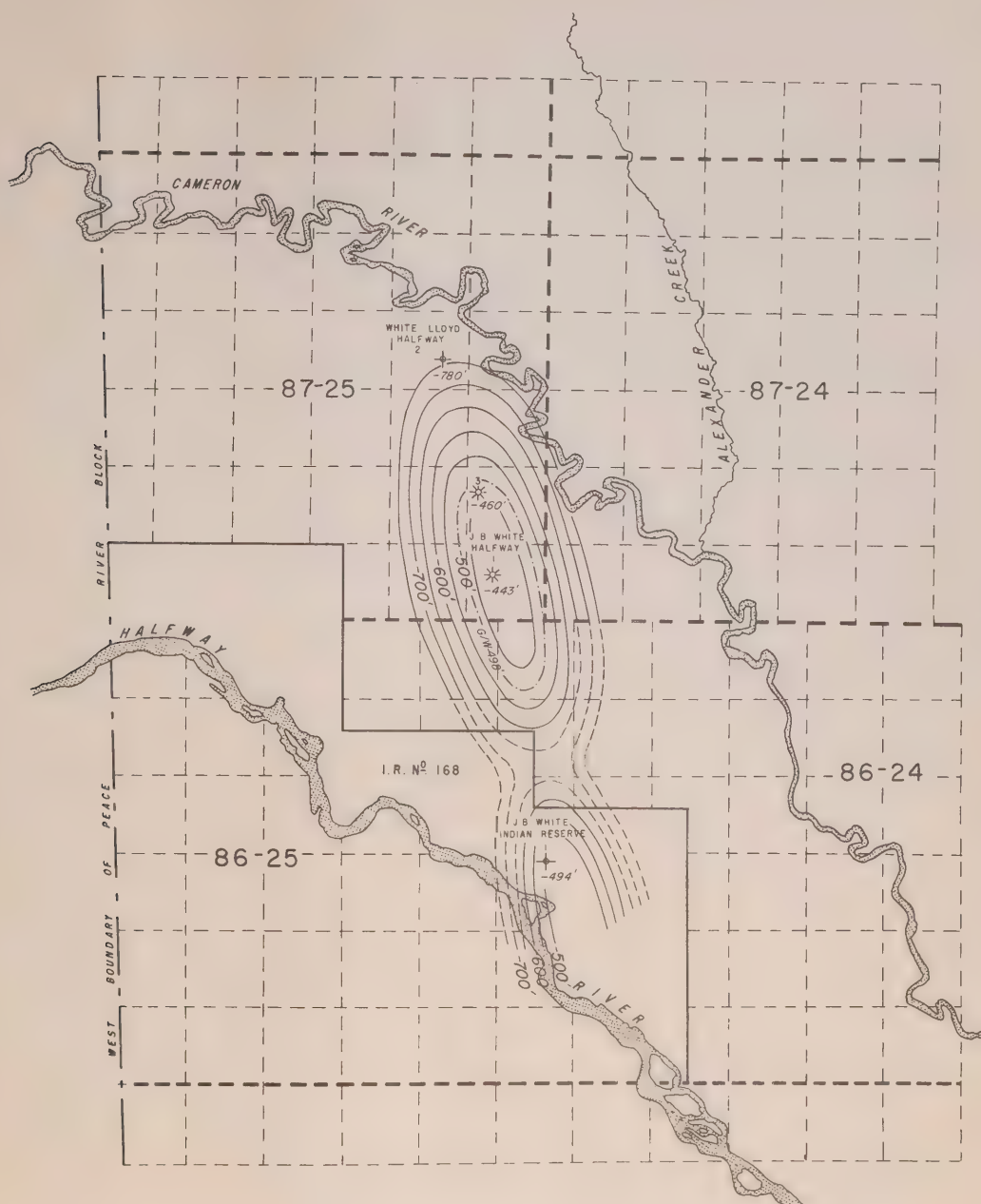
Operating Company: Gulf States Oil Company of Canada

HALFWAY RIVER FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	CADOMIN	"B" ZONE	"D" ZONE	TOTAL FIELD
2. Geologic Age	L. Cretaceous	Triassic	Triassic	
3. Average Depth, Feet	2,830	3,720	5,020	
4. Completed Gas Wells	0	2	1	
5. Proved Area, Acres	1,358	1,845	2,000	
6. Average Pay Thickness, Feet	8.9	16.7	13.0	
7. Acre - Feet	12,064	30,833	26,000	
8. Average Porosity, Per Cent	14.0	8.6	10.0	
9. Average Connate Water, Per Cent	35	20	25	
10. Initial Reservoir Pressure, psia	1,404	1,734	2,307	
11. Reservoir Temperature, Degrees R.	551	573	594	
12. Specific Gravity of Gas	.61	.64	.65	
13. Gas Deviation Factor	.826	.811	.809	
14. Original Gas in Place, Mcf/Ac.Ft.	432	395	554	
15. Original Gas in Place, MMcf	5,211	12,179	14,404	31,794
16. Recovery Factor, Per Cent	75	85	85	
17. Original Recoverable Gas, MMcf	3,908	10,352	12,243	26,503
18. Shrinkage, Fuel, etc., Per Cent	6.0	11.5	11.5	
19. Pipeline Gas Reserve, MMcf	3,673	9,162	10,835	23,670

Operating Company: J. B. White and A. M. Lloyd



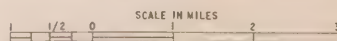
WEST OF SIXTH MERIDIAN

-LEGEND-

- ✱ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

HALFWAY RIVER AREA BRITISH COLUMBIA

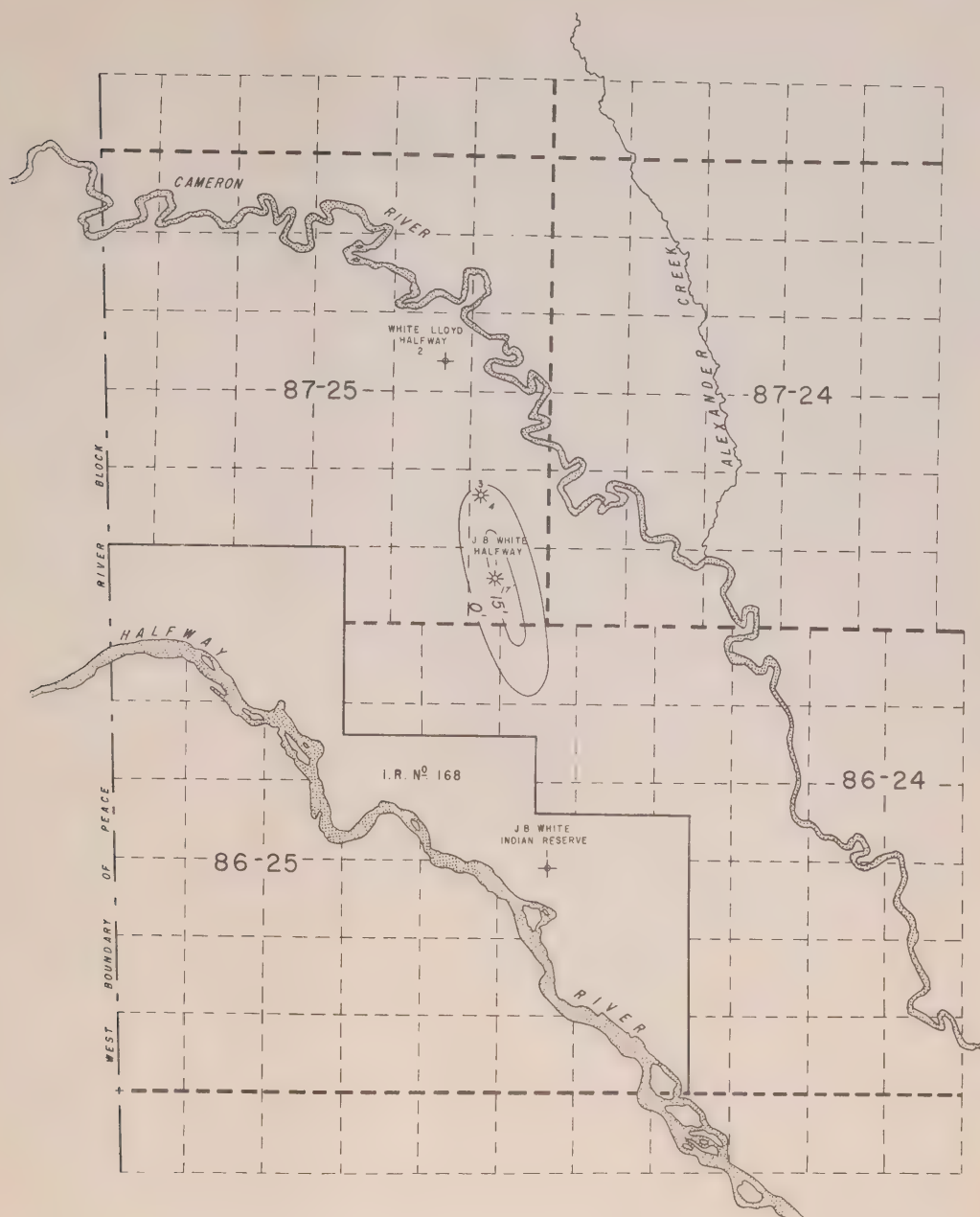
STRUCTURE MAP
CONTOURS ON TOP OF CADOMIN SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



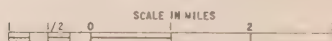
WEST OF SIXTH MERIDIAN

-LEGEND-

- ☼ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

HALFWAY RIVER AREA BRITISH COLUMBIA

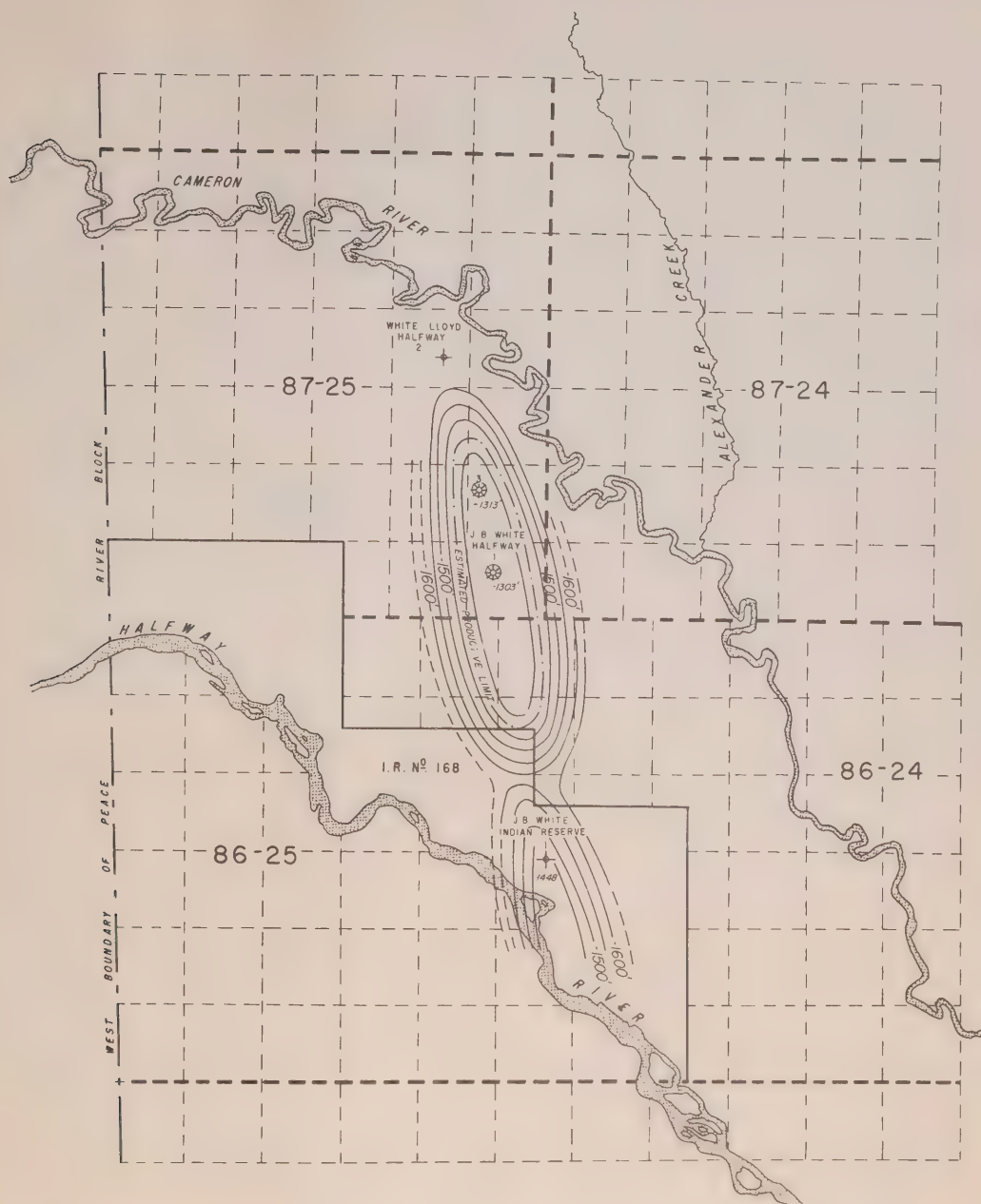
ISOPACHOUS MAP
CADOMIN SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

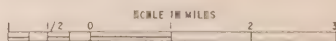
—LEGEND—

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- OIL WELL
- ✚ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⚡ SUSPENDED WELL
- PRINCIPAL ROADS

HALFWAY RIVER AREA

BRITISH COLUMBIA

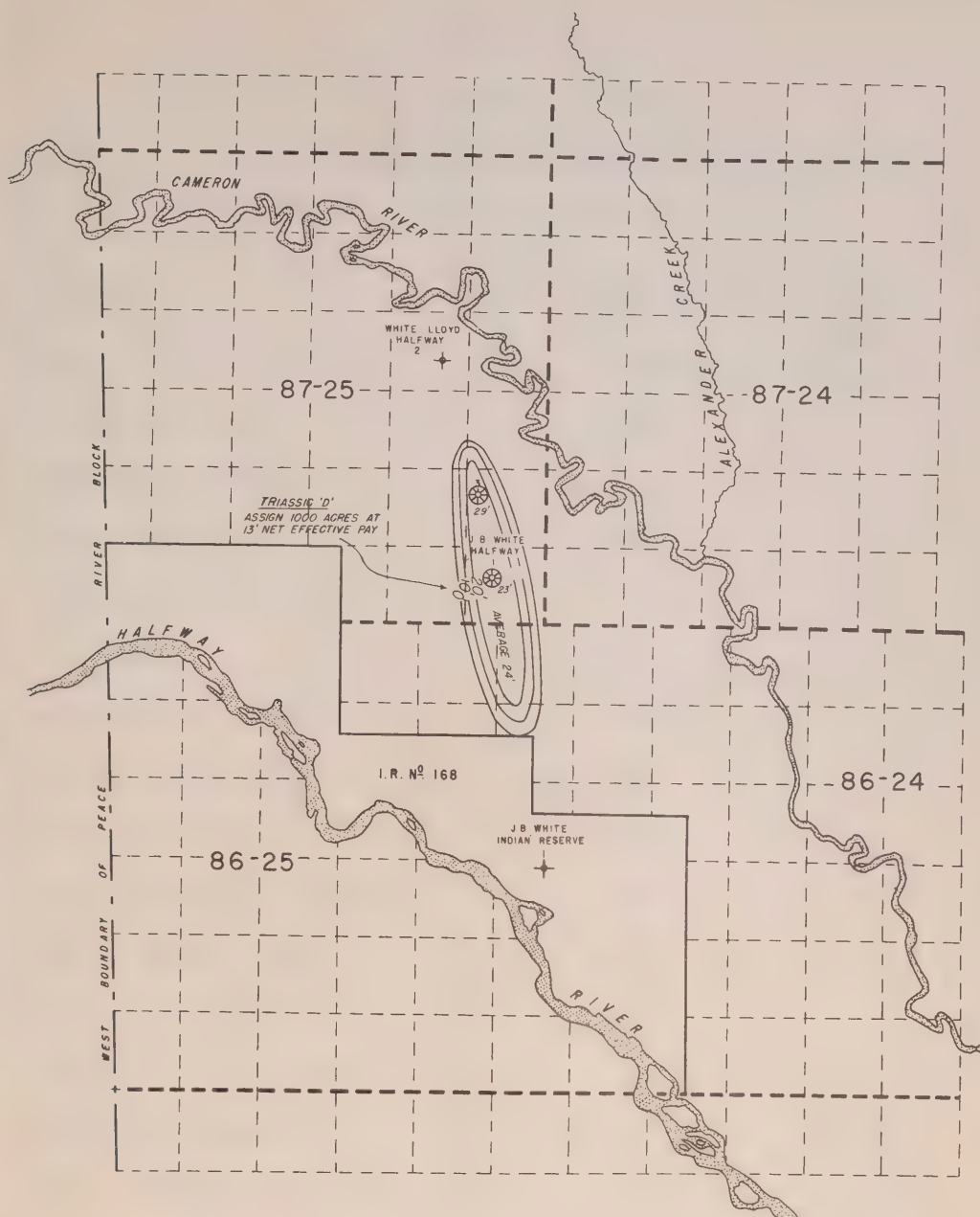
STRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC "B"



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



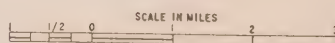
WEST OF SIXTH MERIDIAN

-LEGEND-

- ☼ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

HALFWAY RIVER AREA BRITISH COLUMBIA

ISOPACHOUS MAP
TRIASSIC "B"



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA

KILKERRAN FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

	PERMO-PENN	TOTAL FIELD
1. Reservoir	PERMO-PENN	
2. Geologic Age	Permo-Penn	
3. Average Depth, Feet	7,900	
4. Completed Gas Wells	1	
5. Proved Area, Acres	1,500	
6. Average Pay Thickness, Feet	25	
7. Acre - Feet	37,500	
8. Average Porosity, Per Cent	10 (E)	
9. Average Connate Water, Per Cent	20	
10. Initial Reservoir Pressure, psia	3,448	
11. Reservoir Temperature, Degrees R.	620	
12. Specific Gravity of Gas	.615	
13. Gas Deviation Factor	.875	
14. Original Gas in Place, Mcf/Ac.Ft.	733	
15. Original Gas in Place, MMcf	27,488	27,488
16. Recovery Factor, Per Cent	85	
17. Original Recoverable Gas, MMcf	23,365	23,365
18. Shrinkage, Fuel, etc., Per Cent	9.0	
19. Pipeline Gas Reserve, MMcf	21,262	21,262

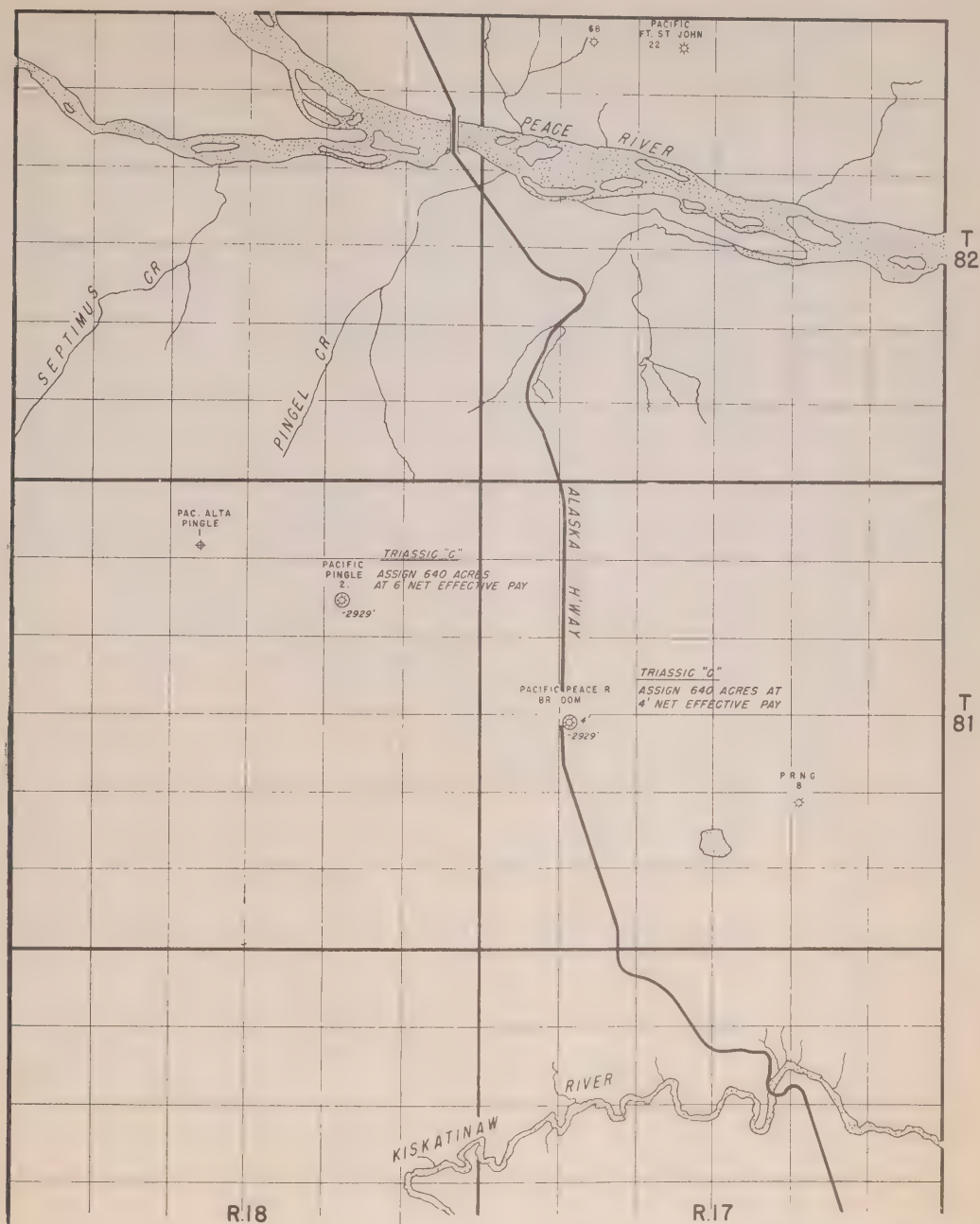
Operating Company: Pacific Petroleum Ltd.

KISKATINAW FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

	CADC MIN	"A" ZONE	P.R.N.G. #8	Pingel #2	Br. Dom. #1	TOTAL FIELD
			"A" ZONE	"C" ZONE	"C" ZONE	
1. Reservoir						
2. Geologic Age	L. Cretaceous	Triassic	Triassic	Triassic	Triassic	
3. Average Depth, Feet	3,940	4,700	4,850	5,525	5,570	
4. Completed Gas Wells	0	0	1	1	1	
5. Proved Area, Acres	1,000	7,050	1,000	640	640	
6. Average Pay Thickness, Feet	21.0	7.0	12.0	6.0	4.0	
7. Acre - Feet	21,000	49,410	12,000	3,840	2,560	
8. Average Porosity, Per Cent	12.7	15.4	15.0 (E)	15.0 (E)	15.0 (E)	
9. Average Connate Water, Per Cent	40	30	30	30	30	
10. Initial Reservoir Pressure, psia	1,395	1,825	1,915	2,232	2,234	
11. Reservoir Temperature, Degrees R.	575	590	593	600	602	
12. Specific Gravity of Gas	.608 (E)	.660	.660	.676	.676	
13. Gas Deviation Factor	.852	.813	.815	.799	.801	
14. Original Gas in Place, Mcf/Ac. Ft.	334	631	640	752	748	
15. Original Gas in Place, MMcf	7,014	31,178	7,680	2,888	1,915	50,675
16. Recovery Factor, Per Cent	85	85	85	85	85	
17. Original Recoverable Gas, MMcf	5,962	26,501	6,528	2,455	1,628	43,074
18. Shrinkage, Fuel, etc., Per Cent	5.0 (E)	8.0	8.0	9.0	9.0	
19. Pipeline Gas Reserve, MMcf	5,664	24,381	6,006	2,234	1,481	39,766

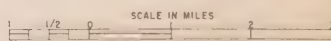
Operating Company: Pacific Petroleum Ltd.



WEST OF SIXTH MERIDIAN

-LEGEND-

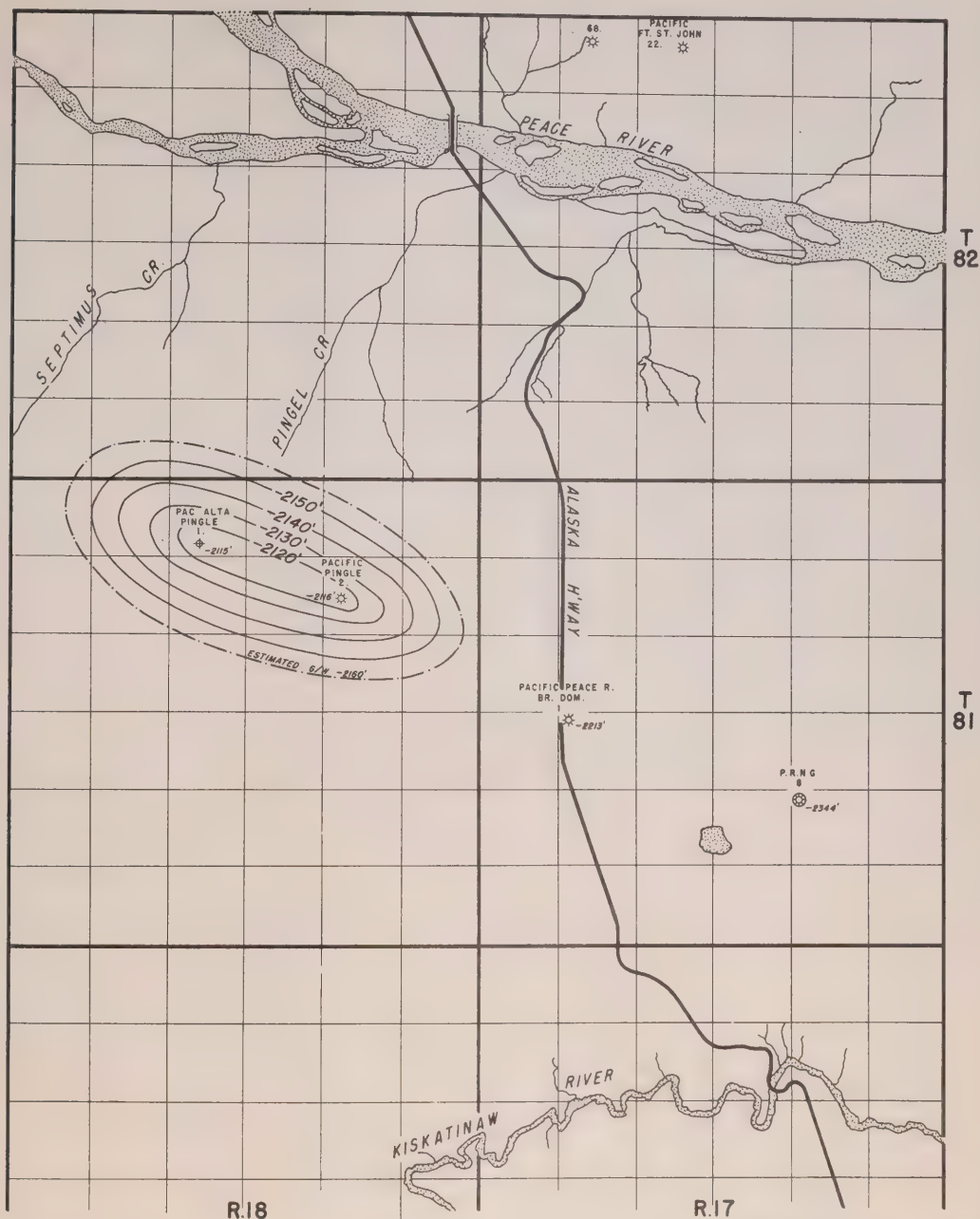
- ☆ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

KISKATINAW AREA
BRITISH COLUMBIASHOWING TRIASSIC "C"
ASSIGNMENTS

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA.



WEST OF SIXTH MERIDIAN

-LEGEND-

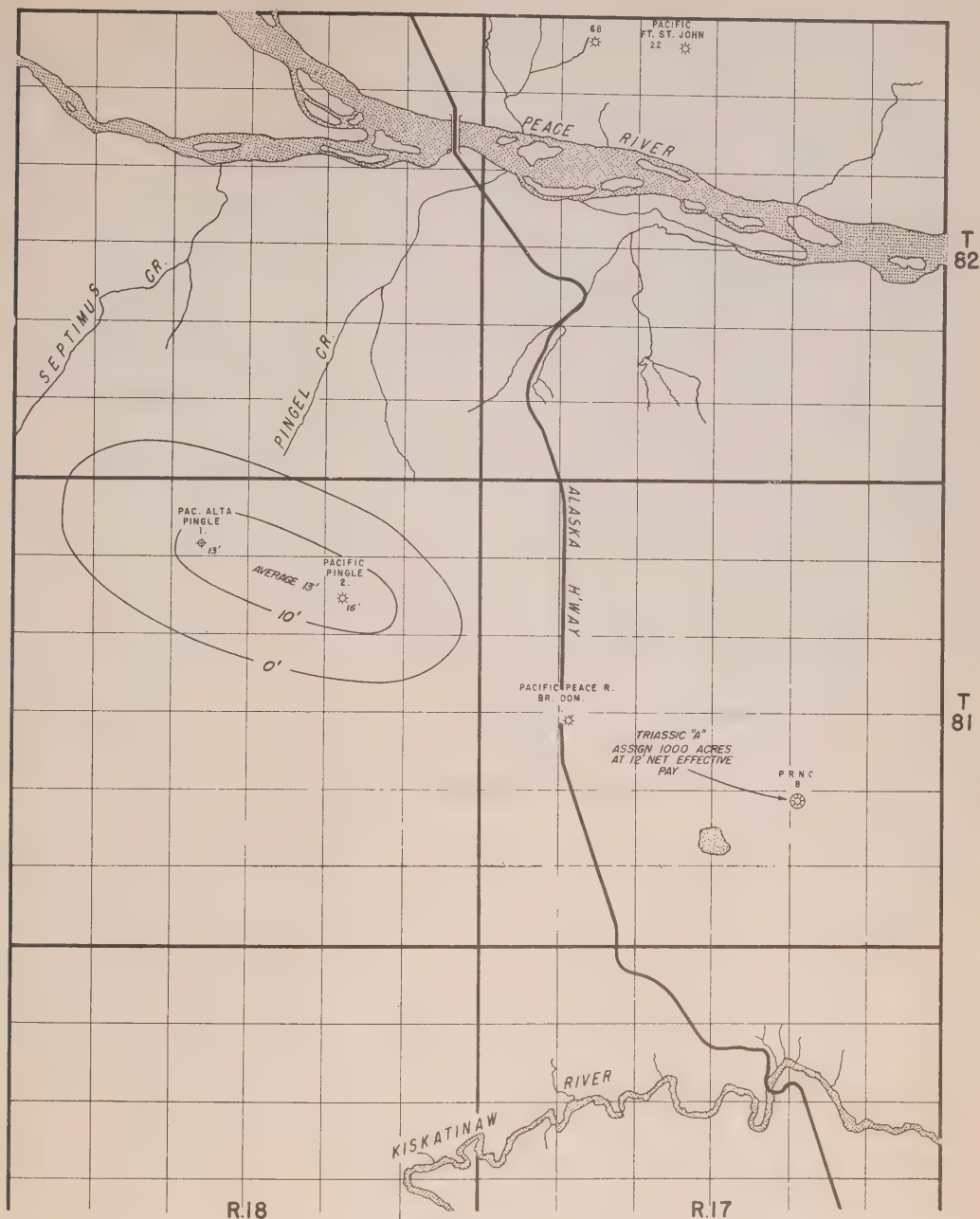
- ☆ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊙ COMPLETED WELL IN THIS ZONE
- ⊗ SUSPENDED WELL
- PRINCIPAL ROADS

KISKATINAW AREA
BRITISH COLUMBIASTRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC "A"SCALE IN MILES
1 1/2 0 2

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1987

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- ☼ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

KISKATINAW AREA BRITISH COLUMBIA

ISOPACHOUS MAP TRIASSIC "A"

SCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA.

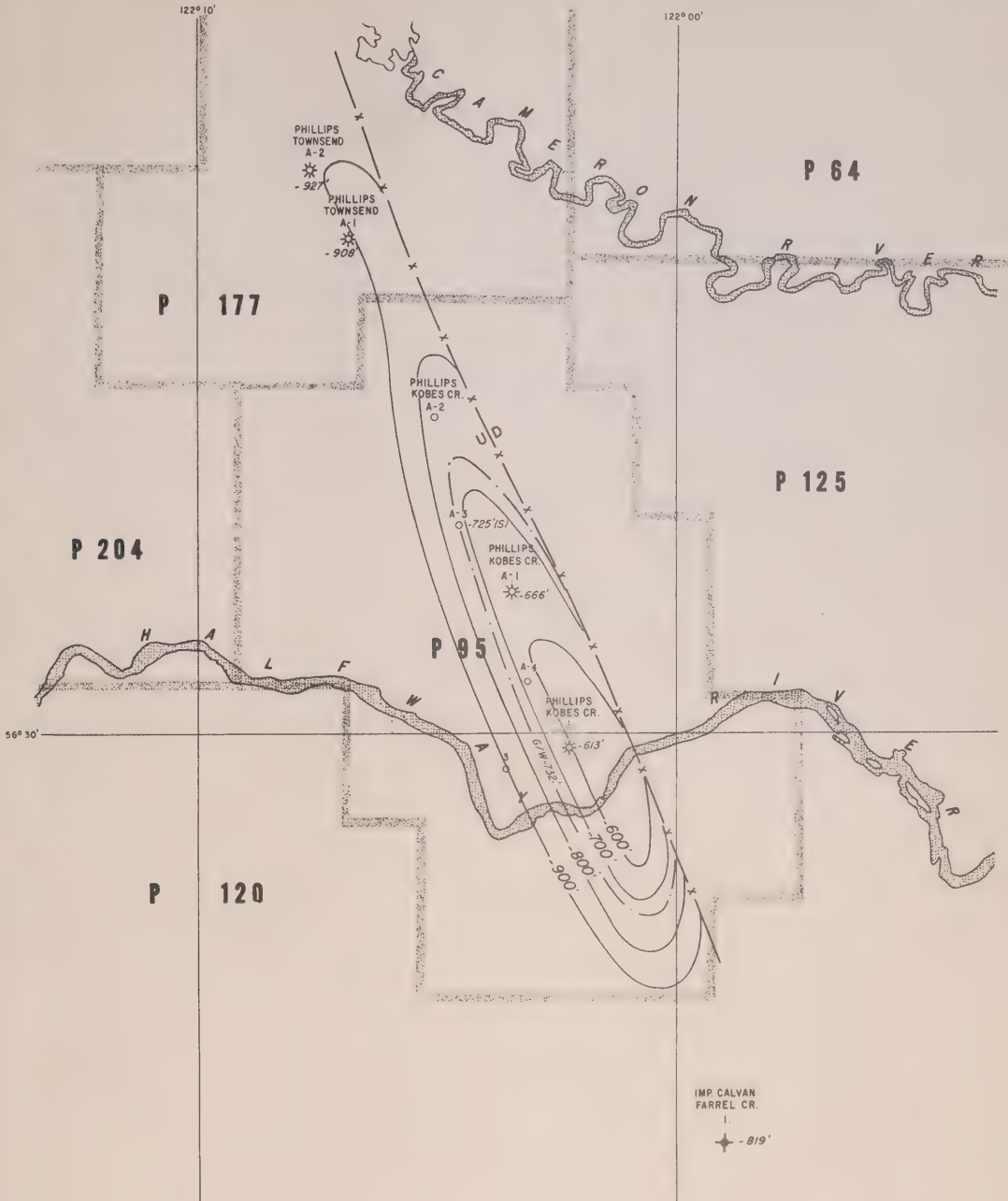


KOBES CREEK - TOWNSEND FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F

1. Reservoir	CADOMIN	STRAY SAND #1	STRAY SAND #2	TRIASSIC "D"	MISSISSIPPIAN	TOTAL FIELD
2. Geologic Age	L. Cretaceous	Triassic	Triassic	Triassic	Mississippian	
3. Average Depth, Feet	3,030	4,870	4,790	5,290	6,950	
4. Completed Gas Wells	0	1	1	2	2	
5. Proved Area, Acres	4,166	1,500	2,000	8,186	2,998	
6. Average Pay Thickness, Feet	36.2	14.0	10.0	44.3	35.0	
7. Acre - Feet	150,594	21,000	20,000	362,416	134,900	
8. Average Porosity, Per Cent	11.4	10.0	10.0	8.0	4.9	
9. Average Connate Water, Per Cent	35	30	30	30	25	
10. Initial Reservoir Pressure, psia	1,453	2,093	2,133	2,333	3,104	
11. Reservoir Temperature, Degrees R.	564	592	594	601	625	
12. Specific Gravity of Gas	.654	.627	.646	.644	.620	
13. Gas Deviation Factor	.814	.823	.818	.820	.870	
14. Original Gas in Place, Mcf/Ac.Ft.	361	462	473	406	323	
15. Original Gas in Place, MMcf	54,364	9,702	9,460	147,866	43,573	264,965
16. Recovery Factor, Per Cent	75	85	85	85	85	
17. Original Recoverable Gas, MMcf	40,773	8,247	8,041	125,686	37,037	219,784
18. Shrinkage, Fuel, etc., Per Cent	8.0	8.5	7.0	8.0	9.0	
19. Pipeline Gas Reserve, MMcf	37,511	7,546	7,478	115,631	33,704	201,870

Operating Company: Phillips Petroleum Company



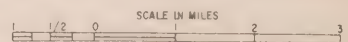
WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ✕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

KOBES CREEK-TOWNSEND AREA BRITISH COLUMBIA

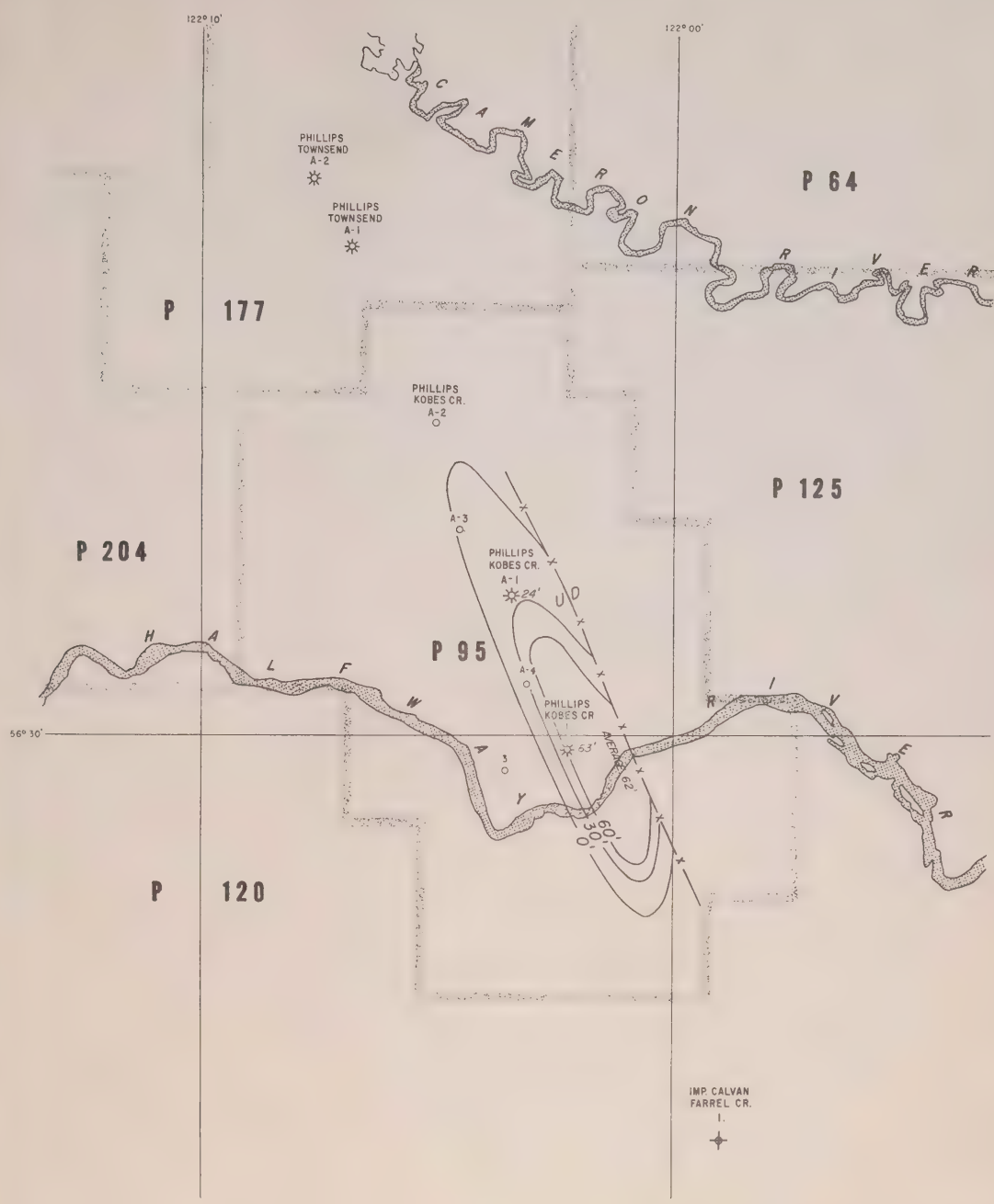
STRUCTURE MAP
CONTOURS ON TOP OF CADOMIN SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

—LEGEND—

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

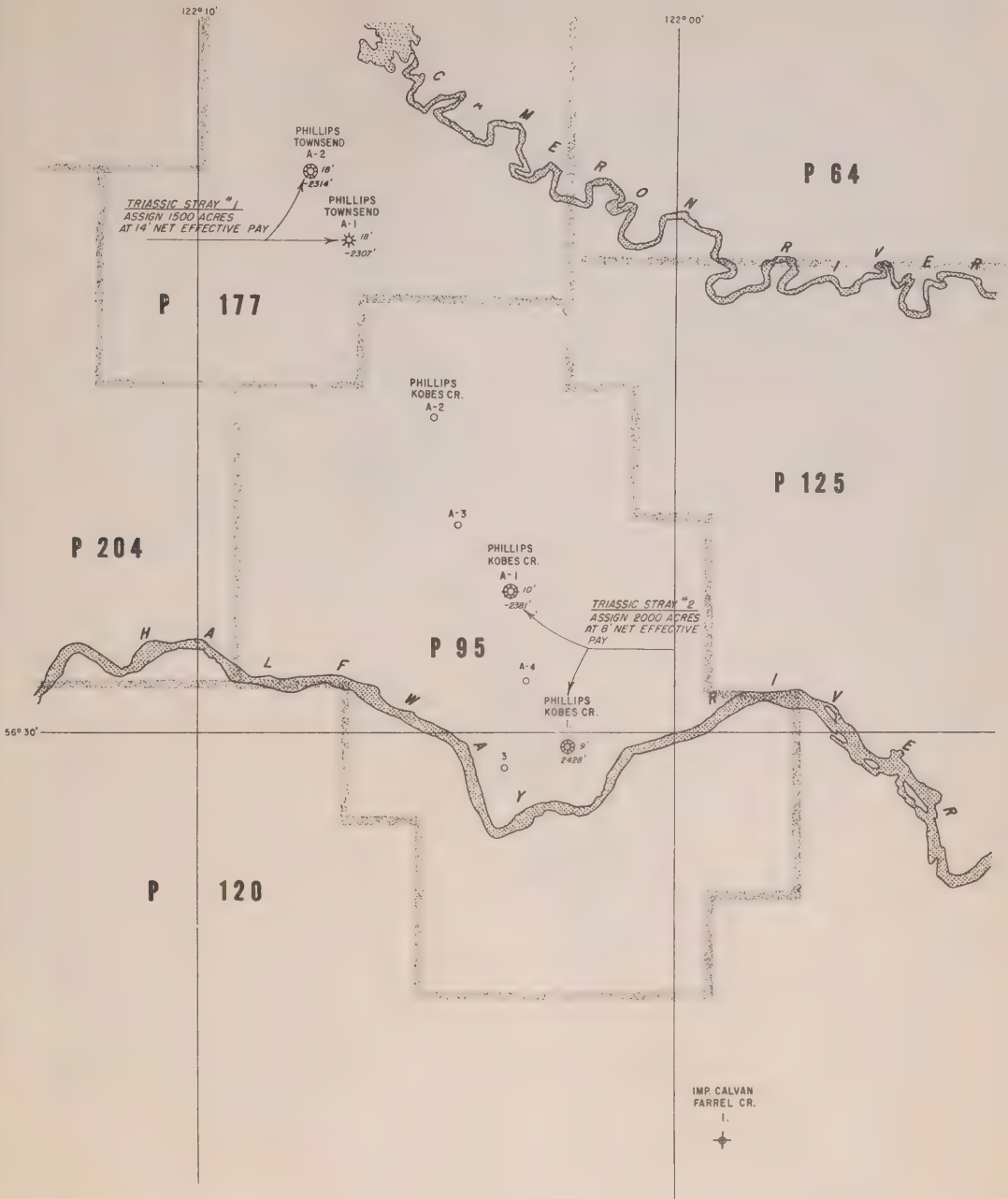
KOBES CREEK-TOWNSEND AREA
BRITISH COLUMBIA

ISOPACHOUS MAP
CADOMIN SANDSTONE

SCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957. CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

KOBES CREEK-TOWNSEND AREA
BRITISH COLUMBIA

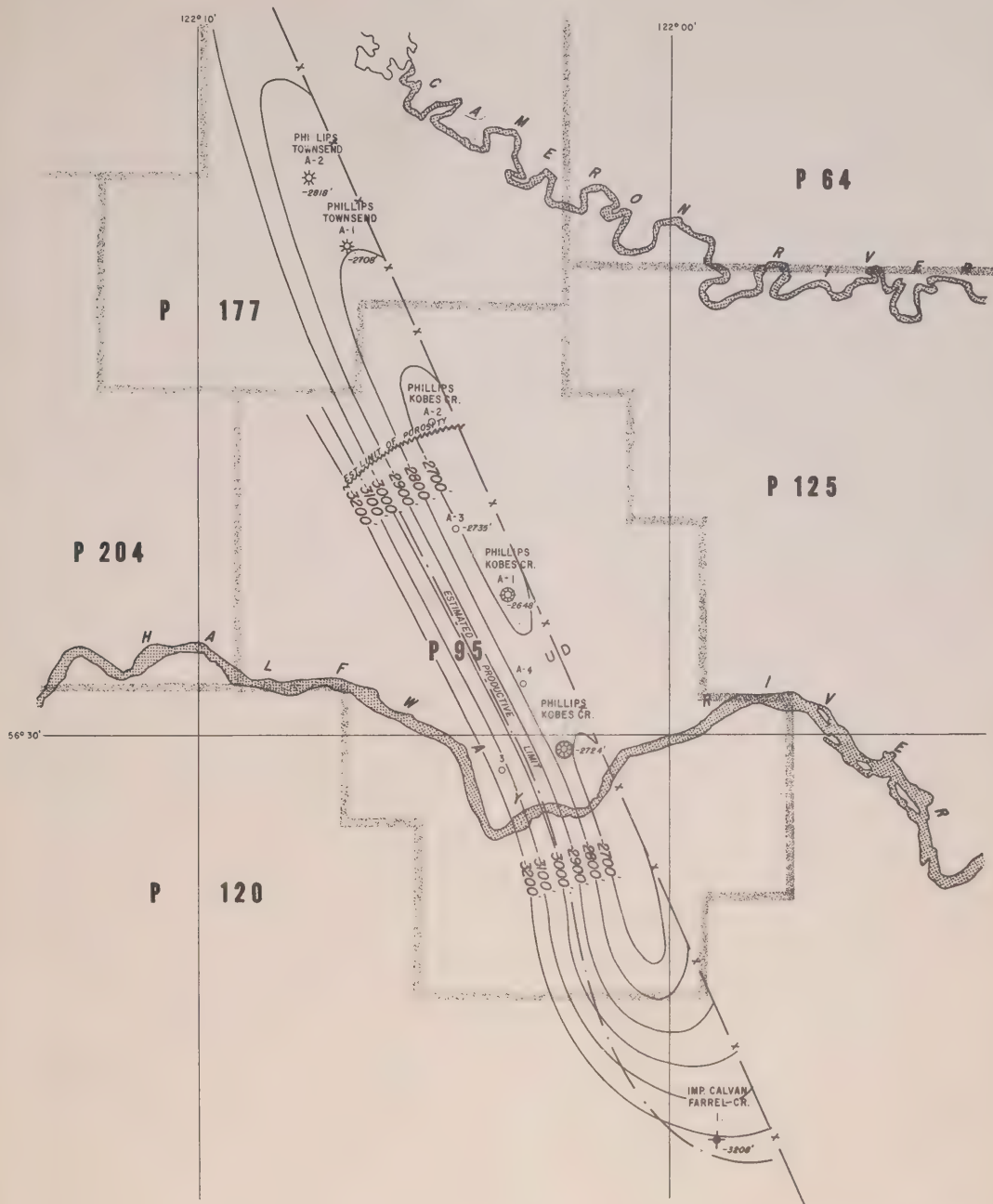
TRIASSIC STRAY SANDS #1 & #2



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

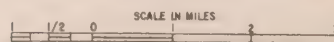
CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

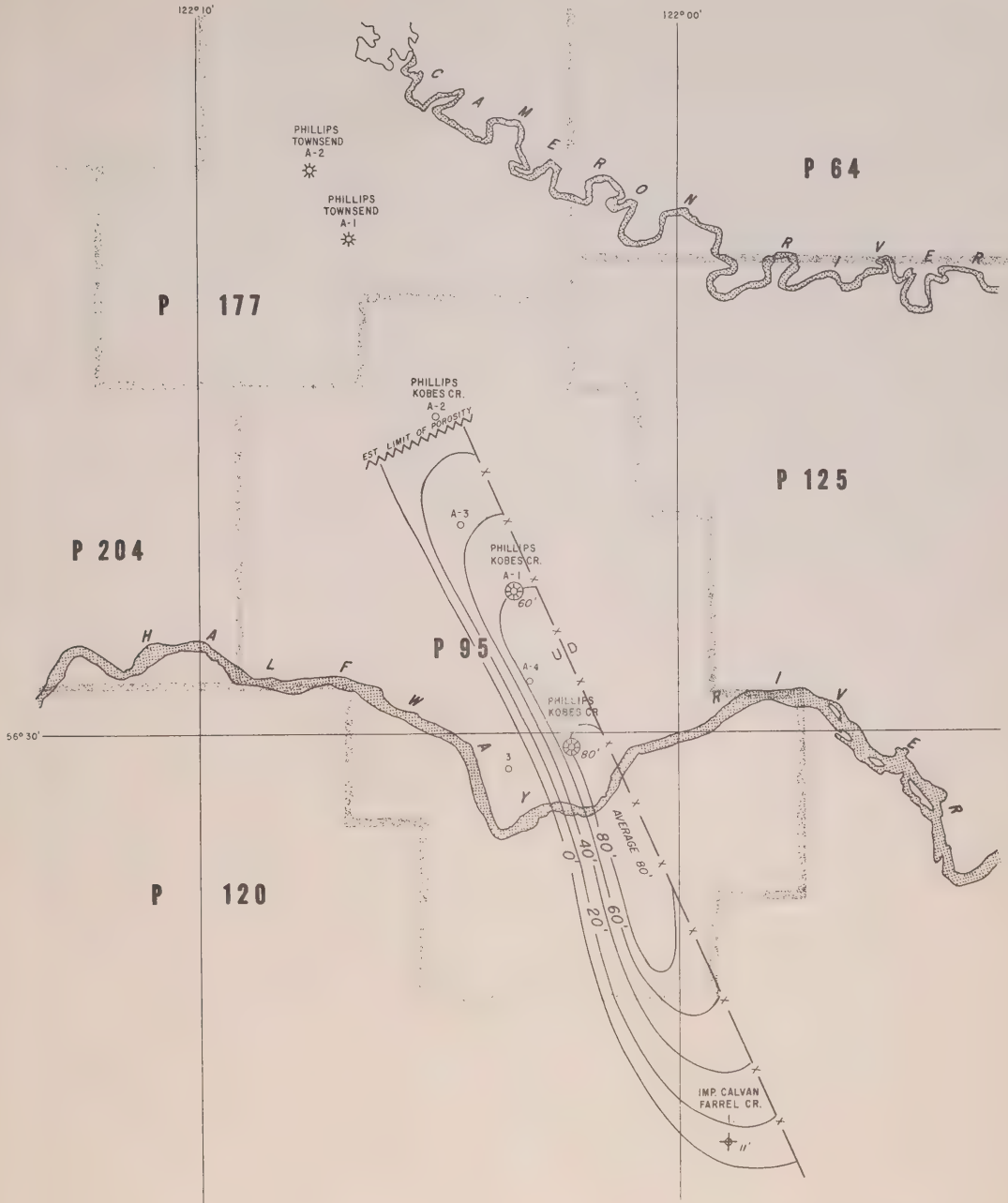
- ☼ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⚡ SUSPENDED WELL
- PRINCIPAL ROADS

KOBES CREEK-TOWNSEND AREA
BRITISH COLUMBIASTRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC 'D'

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

KOBES CREEK-TOWNSEND AREA
BRITISH COLUMBIAISOPACHOUS MAP
TRIASSIC "D"

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA



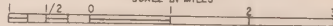
✦ - 5202'

WEST OF SIXTH MERIDIAN

-LEGEND-

- STRUCTURE MAP
CONTOURS ON TOP OF MISSISSIPPIAN

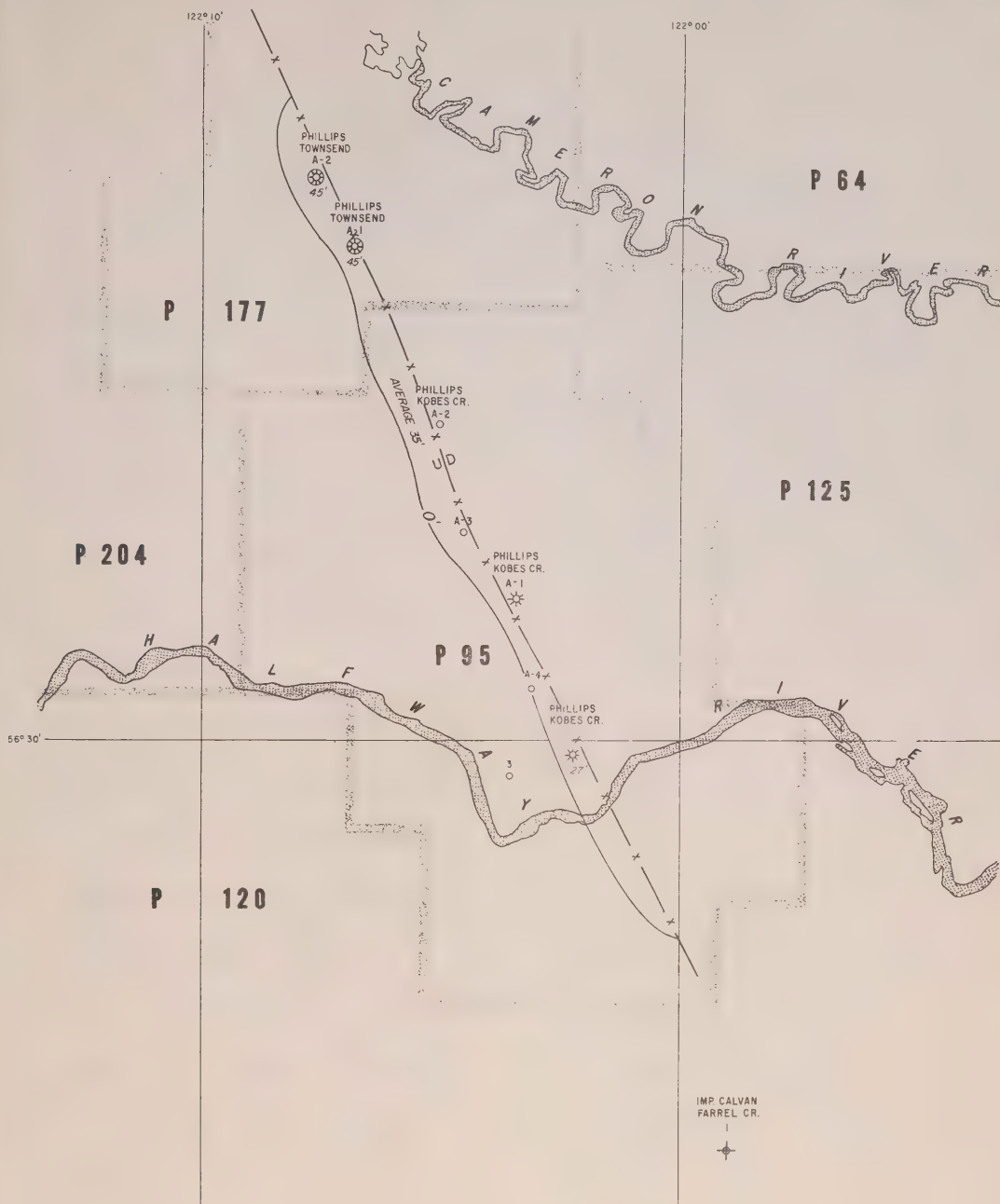
SCALE IN MILES



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

KOBES CREEK-TOWNSEND AREA

BRITISH COLUMBIA

ISOPACHOUS MAP
MISSISSIPPIAN

SCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

CALGARY, ALTA

LOMA FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

	<u>Sinclair B2-3</u> <u>"A" ZONE</u>	<u>TOTAL</u> <u>FIELD</u>
1. Reservoir		
2. Geologic Age	Triassic	
3. Average Depth, Feet	4,400	
4. Completed Gas Wells	1	
5. Proved Area, Acres	1,000	
6. Average Pay Thickness, Feet	10.0	
7. Acre - Feet	10,000	
8. Average Porosity, Per Cent	12.5 (E)	
9. Average Connate Water, Per Cent	20	
10. Initial Reservoir Pressure, psia	1,554	
11. Reservoir Temperature, Degrees R.	578	
12. Specific Gravity of Gas	.667 (E)	
13. Gas Deviation Factor	.807	
14. Original Gas in Place, Mcf/Ac.Ft.	512	
15. Original Gas in Place, MMcf	5,120	5,120
16. Recovery Factor, Per Cent	85	
17. Original Recoverable Gas, MMcf	4,352	4,352
18. Shrinkage, Fuel, etc., Per Cent	10.0 (E)	
19. Pipeline Gas Reserve, MMcf	3,917	3,917

Operating Company: Sinclair Canada Oil Company

MONTNEY FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	Well #3	"C" ZONE	TOTAL FIELD
	GETHING		
2. Geologic Age	L. Cretaceous	Triassic	
3. Average Depth, Feet	3,635	4,280	
4. Completed Gas Wells	1	1	
5. Proved Area, Acres	1,000	5,077	
6. Average Pay Thickness, Feet	5.0	5.0	
7. Acre - Feet	5,000	25,381	
8. Average Porosity, Per Cent	17 (E)	15 (E)	
9. Average Connate Water, Per Cent	35	30	
10. Initial Reservoir Pressure, psia	1,263	1,763	
11. Reservoir Temperature, Degrees R.	580	592	
12. Specific Gravity of Gas	.652	.759	
13. Gas Deviation Factor	.849	.735	
14. Original Gas in Place, Mcf/Ac. Ft.	436	654	
15. Original Gas in Place, MMcf	2,180	16,599	18,779
16. Recovery Factor, Per Cent	85	85	
17. Original Recoverable Gas, MMcf	1,853	14,109	15,962
18. Shrinkage, Fuel, etc., Per Cent	8.0	23.0	
19. Pipeline Gas Reserve, MMcf	1,705	10,864	12,569

Operating Company: Pacific Petroleum Ltd.







STODDART FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

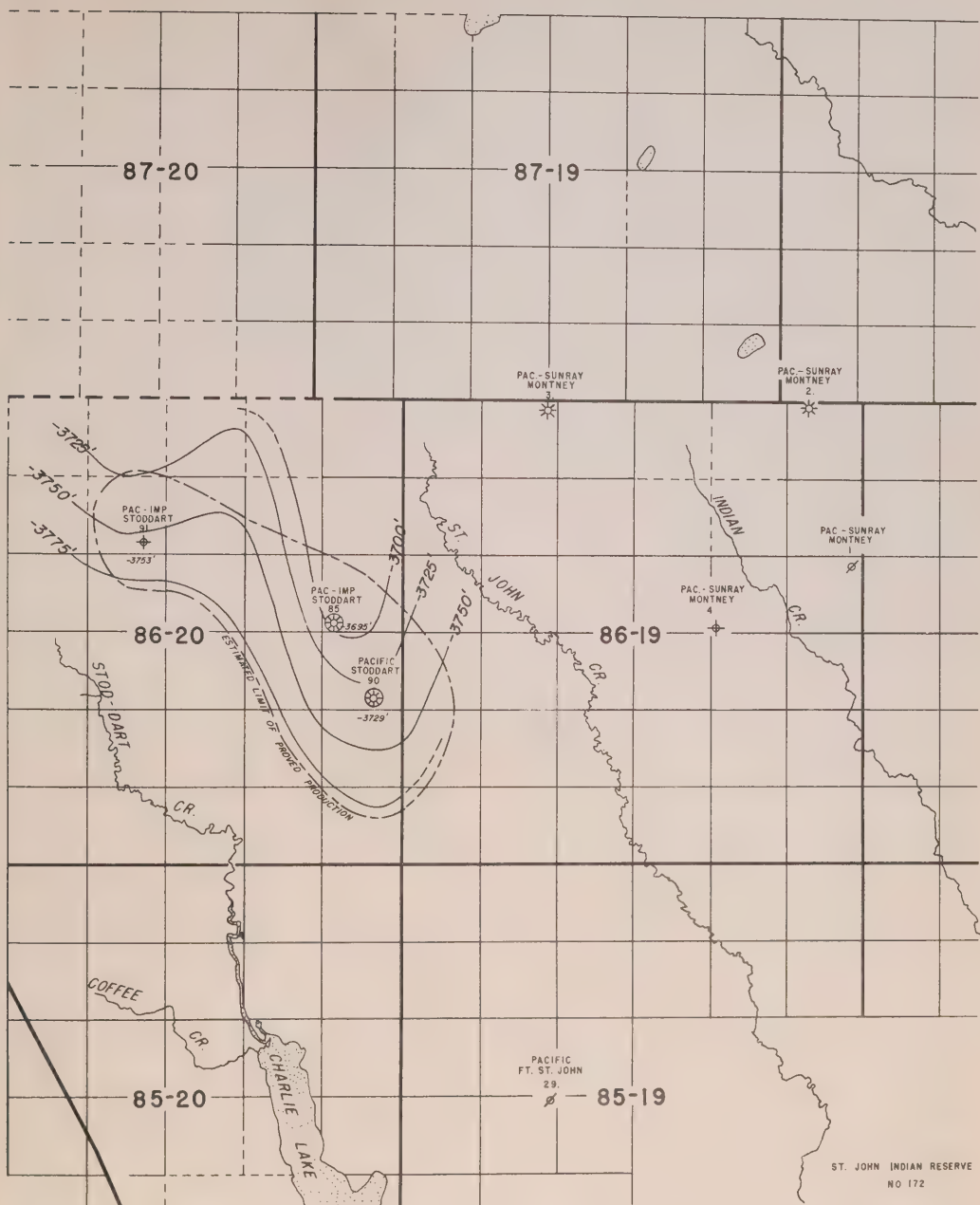
Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	PERMO-PENN	TOTAL FIELD
2. Geologic Age	Permo-Penn	
3. Average Depth, Feet	6,350	
4. Completed Gas Wells	2	
5. Proved Area, Acres	6,201	
6. Average Pay Thickness, Feet	9.0	
7. Acre - Feet	55,519	
8. Average Porosity, Per Cent	14.1	
9. Average Connate Water, Per Cent	25	
10. Initial Reservoir Pressure, psia	2,414	
11. Reservoir Temperature, Degrees R.	610	
12. Specific Gravity of Gas	.660	
13. Gas Deviation Factor	.820	
14. Original Gas in Place, Mcf/Ac.Ft.	785	
15. Original Gas in Place, MMcf	43,582	43,582
16. Recovery Factor, Per Cent	85	
17. Original Recoverable Gas, MMcf	37,045	37,045
18. Shrinkage, Fuel, etc., Per Cent	8.0	
19. Pipeline Gas Reserve, MMcf	34,081	34,081

Operating Company: Pacific Petroleum Ltd.

CALGARY, ALTA

 GAS WELL
 OIL WELL
 DRY & ABANDONED
 COMPLETED WELL IN THIS ZONE
 SUSPENDED WELL
 PRINCIPAL ROADS



WEST OF SIXTH MERIDIAN

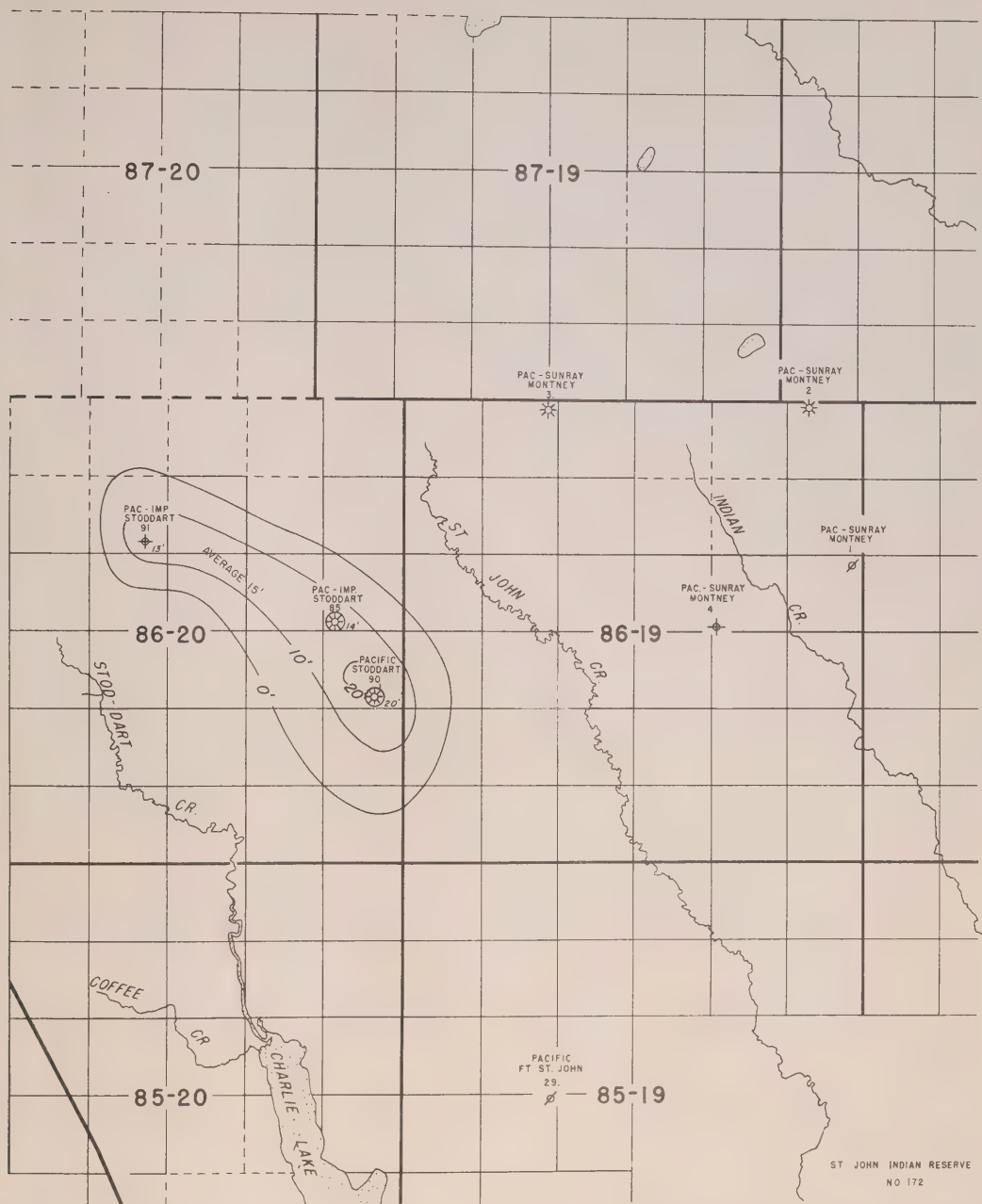
-LEGEND-

- * GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

MONTNEY—STODDART AREA
BRITISH COLUMBIASTRUCTURE MAP
CONTOURS ON TOP OF PERMO-PENNSYLVANIANSCALE IN MILES
1 1/2 0 2 3

WESTCOAST TRANSMISSION CO.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

MONTNEY-STODDART AREA
BRITISH COLUMBIAISOPACHOUS MAP
PERMO-PENNSYLVANIAN

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA

PARKLAND FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

Reservoir	PERMO-PENN	Sinclair B6-1 STODDART	DEVONIAN	TOTAL FIELD
Geologic Age	Permo-Penn	Mississippian	Devonian	
Average Depth, Feet	6,960	8,370	10,910	
Completed Gas Wells	0	0*	1	
Proved Area, Acres	2,500	1,000	2,500	
Average Pay Thickness, Feet	10	20 (E)	40	
Acre - Feet	25,000	20,000	100,000	
Average Porosity, Per Cent	10 (E)	10 (E)	15 (E)	
Average Connate Water, Per Cent	25	15	20	
Initial Reservoir Pressure, psia	3,015	3,650 (E)	4,925	
Reservoir Temperature, Degrees R.	613	642	680	
Specific Gravity of Gas	.640	.650 (E)	.620	
Gas Deviation Factor	.848	.899	1.150	
Original Gas in Place, Mcf/Ac.Ft.	669	826	1,178	
Original Gas in Place, MMcf	16,725	16,520	117,800	151,045
Recovery Factor, Per Cent	85	85	85	
Original Recoverable Gas, MMcf	14,216	14,042	100,130	128,388
Shrinkage, Fuel, etc., Per Cent	7.5	7.0 (E)	6.0	
Pipeline Gas Reserve, MMcf	13,150	13,059	94,122	120,331

Operating Company: Pacific Petroleum Ltd.

* Drilling Well

RED CREEK FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA







Gas Volumes at 14.73 psia and 60° F.

			Wells #35 & 82 "D" ZONE	TOTAL FIELD
1. Reservoir	"C" ZONE	"D" ZONE		
2. Geologic Age	Triassic	Triassic	Triassic	
3. Average Depth, Feet	4,950	5,190	5,475	
4. Completed Gas Wells	0	3	0*	
5. Proved Area, Acres	640	4,614	2,000	
6. Average Pay Thickness, Feet	6.0	20.7	22.0	
7. Acre - Feet	3,840	95,610	44,000	
8. Average Porosity, Per Cent	15 (E)	10	10	
9. Average Connate Water, Per Cent	30	30	30	
10. Initial Reservoir Pressure, psia	1,860	2,035	2,035	
11. Reservoir Temperature, Degrees R.	586	595	595	
12. Specific Gravity of Gas	.668 (E)	.872	.872	
13. Gas Deviation Factor	.805	.642	.642	
14. Original Gas in Place, Mcf/Ac.Ft.	636	573	573	
15. Original Gas in Place, MMcf	2,443	54,785	25,212	82,440
16. Recovery Factor, Per Cent	85	85	85	
17. Original Recoverable Gas, MMcf	2,077	46,567	21,430	70,074
18. Shrinkage, Fuel, etc., Per Cent	2 (E)	22.0	22.0	
19. Pipeline Gas Reserve, MMcf	2,035	36,322	16,715	55,072

Operating Company: Pacific Petroleum Ltd.

* Wells Abandoned due to mechanical failure

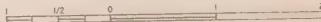
- LEGEND -

-  GAS WELL
 OIL WELL
 DRY & ABANDONED
 COMPLETED WELL IN THIS ZONE
 SUSPENDED WELL
 PRINCIPAL ROADS

STRUCTURE MAP

CONTOURS ON TOP OF TRIASSIC "D" ZONE II

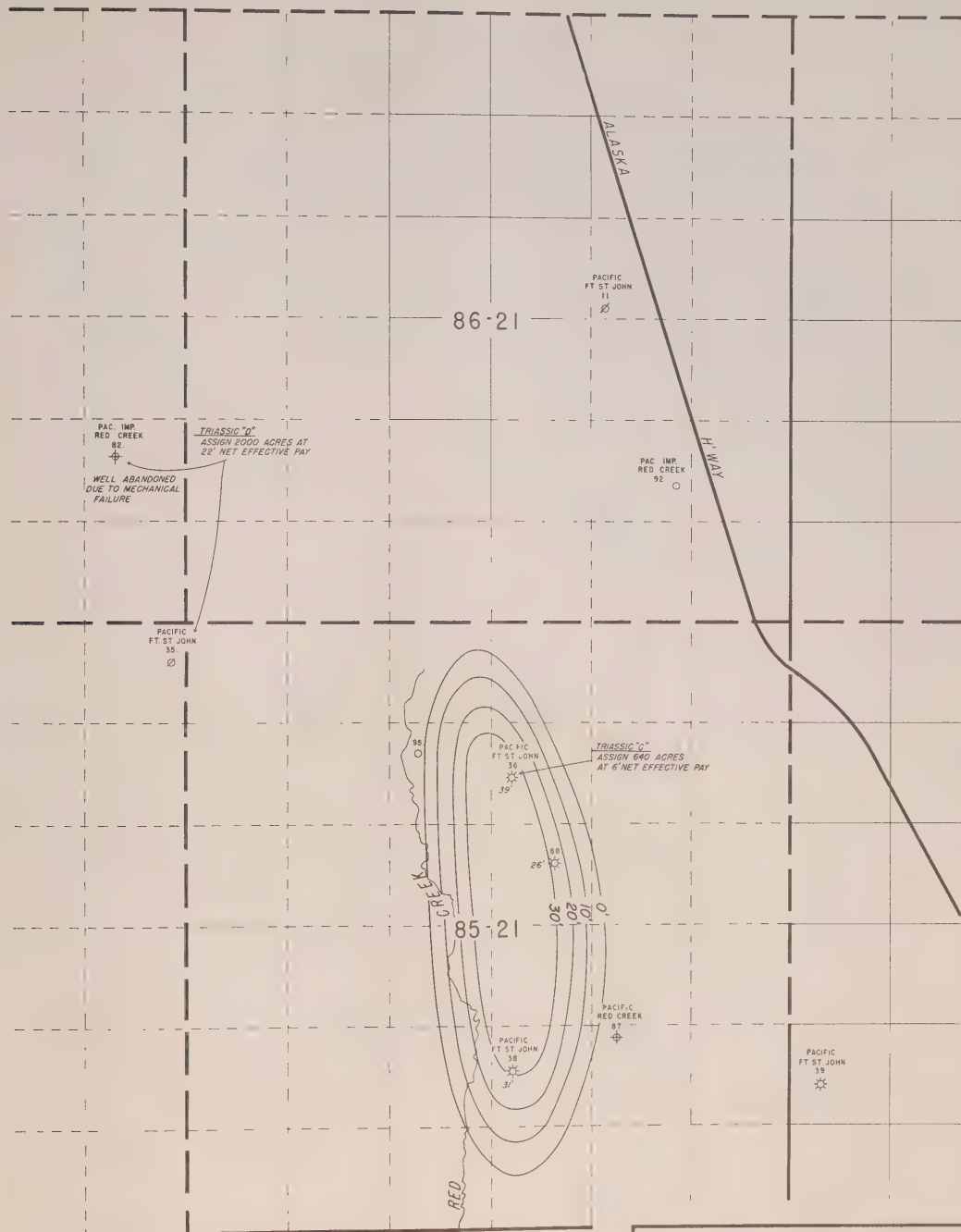
SCALE IN MILES



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



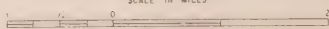
WEST OF SIXTH MERIDIAN

- LEGEND -

- ☼ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊕ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

RED CREEK AREA
BRITISH COLUMBIAISOPACHOUS MAP
TRIASSIC "D"

SCALE IN MILES



WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

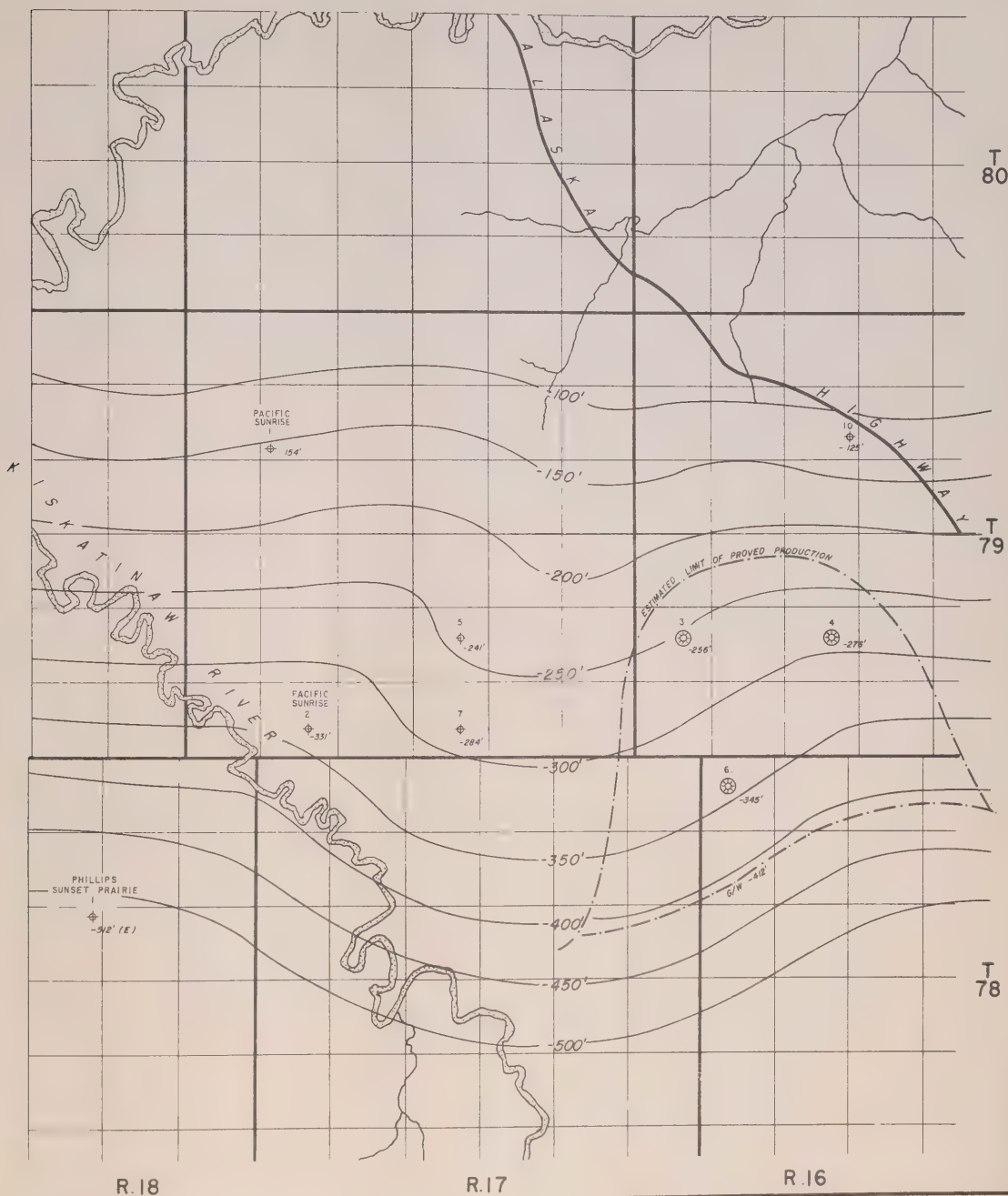
CALGARY, ALTA.

SUNRISE FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	CADOTTE	TOTAL FIELD
2. Geologic Age	L. Cretaceous	
3. Average Depth, Feet	3,038	
4. Completed Gas Wells	3	
5. Proved Area, Acres	10,709	
6. Average Pay Thickness, Feet	29.4	
7. Acre - Feet	315,195	
8. Average Porosity, Per Cent	18.0	
9. Average Connate Water, Per Cent	35	
10. Initial Reservoir Pressure, psia	692	
11. Reservoir Temperature, Degrees R.	553	
12. Specific Gravity of Gas	.592	
13. Gas Deviation Factor	.915	
14. Original Gas in Place, Mcf/Ac.Ft.	247	
15. Original Gas in Place, MMcf	77,853	77,853
16. Recovery Factor, Per Cent	75	
17. Original Recoverable Gas, MMcf	58,390	58,390
18. Shrinkage, Fuel, etc., Per Cent	2.0	
19. Pipeline Gas Reserve, MMcf	57,222	57,222

Operating Company: Pacific Petroleum Ltd.



R.18

R.17

R.16

T 78

T 79

T 80

WEST OF SIXTH MERIDIAN

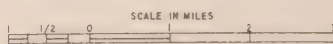
-LEGEND-

- ☼ GAS WELL
- DRY WELL
- ⊕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

SUNRISE AREA

BRITISH COLUMBIA

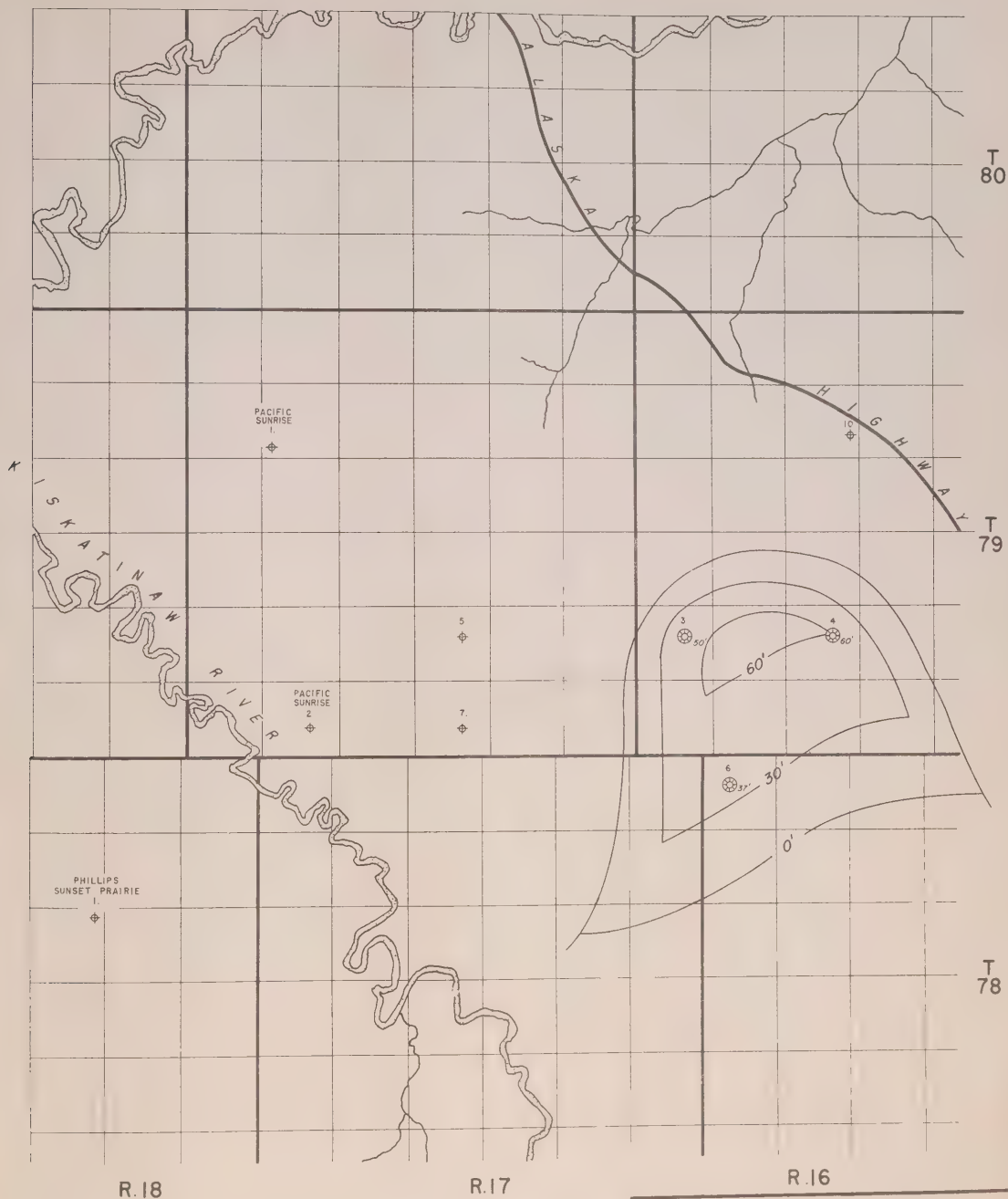
STRUCTURE MAP
CONTOURS ON TOP OF CADOTTE SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

SUNRISE AREA BRITISH COLUMBIA

ISOPACHOUS MAP CADOTTE SANDSTONE



WESTCOAST TRANSMISSION CO.

SEPT 1, 1957

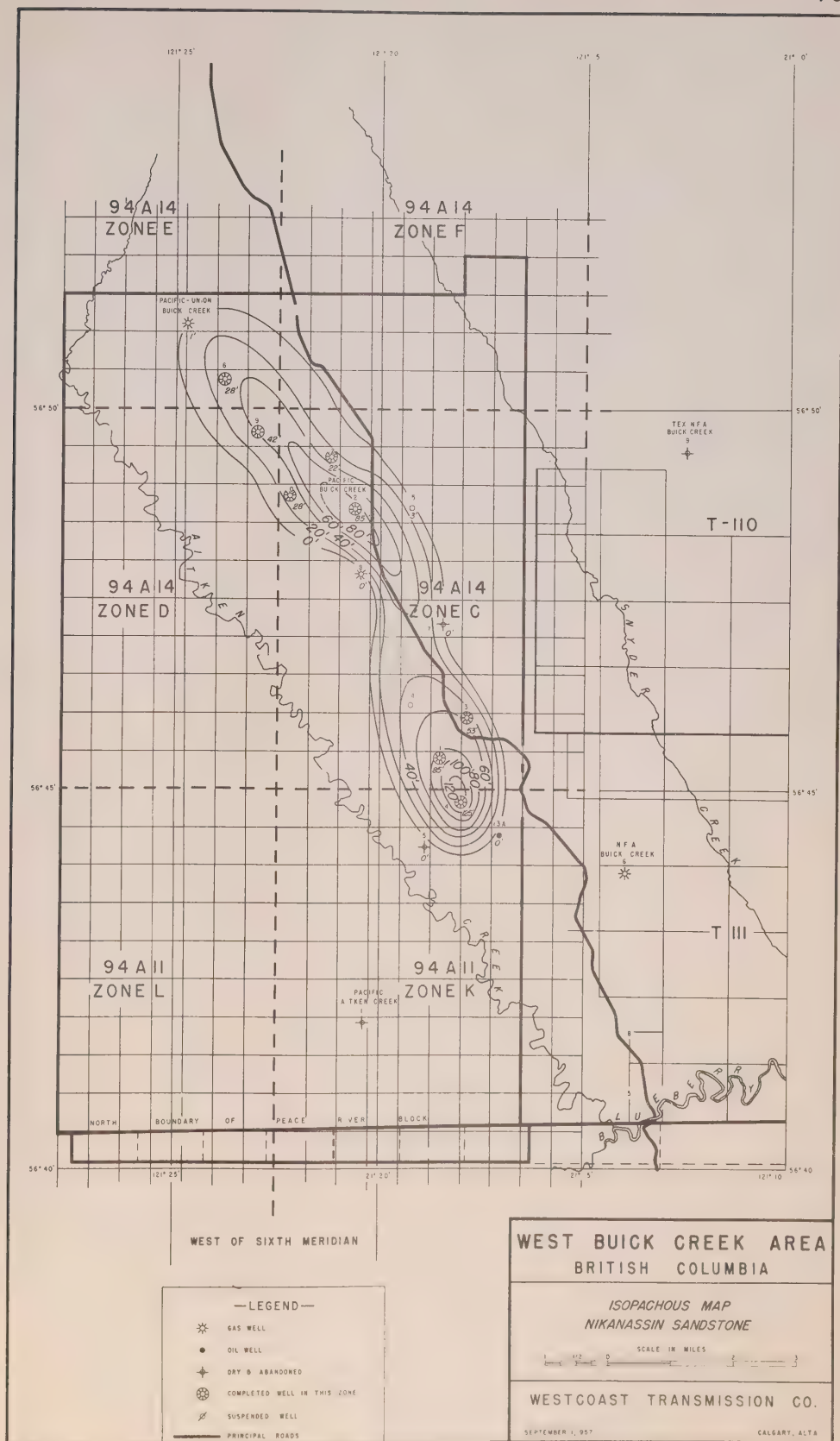
CALGARY, ALTA

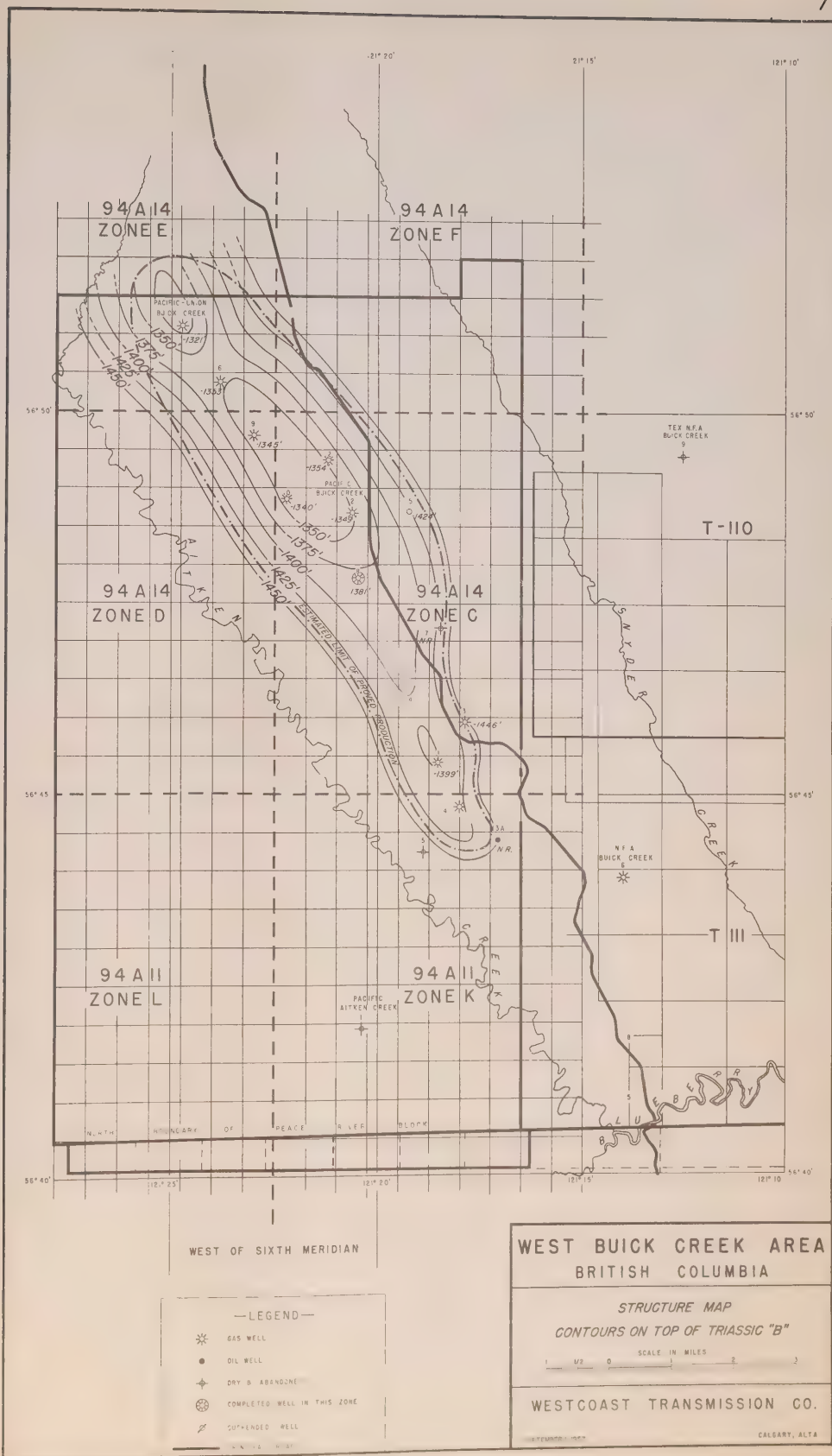
WEST BUICK CREEK FIELDBRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

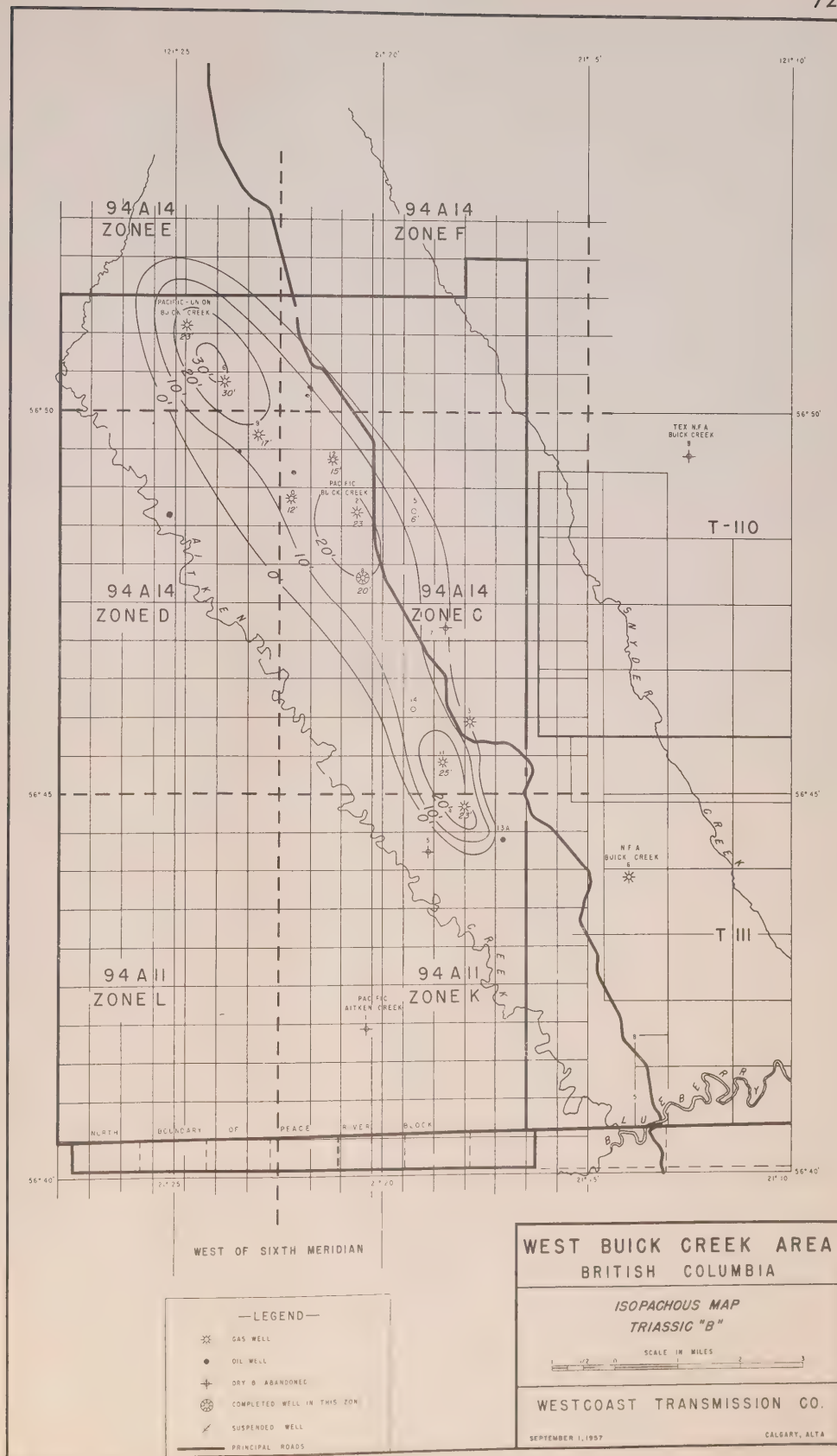
Gas Volumes at 14.73 psia and 60° F.

	Reservoir	NIKANASSIN	"B" ZONE	"D" ZONE	TOTAL FIELD
	Geologic Age	L. Cretaceous	Triassic	Triassic	
	Average Depth, Feet	3,760	3,970	4,700	
	Completed Gas Wells	8	1	1	
	Proved Area, Acres	8,860	12,143	1,500	
6	Average Pay Thickness, Feet	36.2	12.7	37.0	
"	Acre - Feet	320,854	153,951	55,500	
8	Average Porosity, Per Cent	10.6	10.0	11.0	
9	Average Connate Water, Per Cent	30	25	25	
10	Initial Reservoir Pressure, psia	1,334	1,454	1,748	
	Reservoir Temperature, Degrees R.	566	575	587	
12	Specific Gravity of Gas	.666	.670	.822	
13	Gas Deviation Factor	.822	.819	.688	
14	Original Gas in Place, Mcf/Ac.Ft.	327	356	549	
15	Original Gas in Place, MMcf	104,919	54,807	30,470	190,196
16	Recovery Factor, Per Cent	85	85	85	
17	Original Recoverable Gas, MMcf	89,181	46,586	25,900	161,667
18	Shrinkage, Fuel, etc., Per Cent	9.0	10.0	25.0	
19	Pipeline Gas Reserve, MMcf	81,155	41,927	19,425	142,507

Operating Company: Pacific Petroleum Ltd.







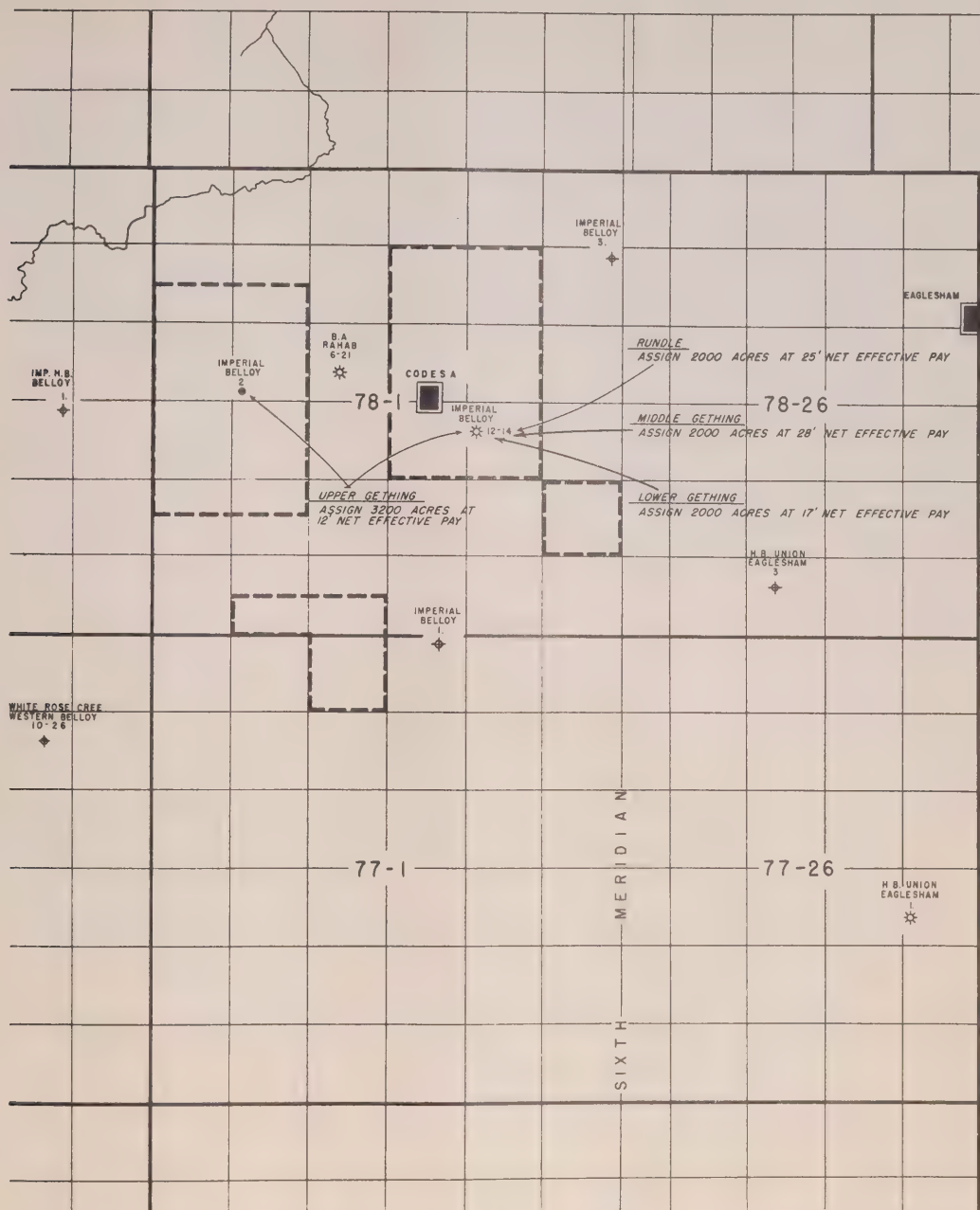
ALBERTA FIELDS

BELLOY FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

Reservoir	Upper GETHING	Middle GETHING	Lower GETHING	RUNDLE	TOTAL FIELD
Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	Mississippian	
Average Depth, Feet	2,990	3,040	3,110	4,650	
Completed Gas Wells	1	1	1	0	
Proved Area, Acres	3,200	2,000	2,000	2,000	
Average Pay Thickness, Feet	12	28	17	25	
Acre - Feet	38,400	56,000	34,000	50,000	
Average Porosity, Per Cent	20 (E)	20 (E)	20 (E)	8 (E)	
Average Connate Water, Per Cent	35	35	35	20	
Initial Reservoir Pressure, psia	1,374 (E)	1,376 (E)	1,380 (E)	2,240 (E)	
Reservoir Temperature, Degrees R.	568	569	571	597	
Specific Gravity of Gas	.570	.574	.584	.600 (E)	
Gas Deviation Factor	.870	.870	.865	.845	
Original Gas in Place, Mcf/Ac.Ft.	556	556	559	437	
Original Gas in Place, MMcf	21,350	31,136	19,006	21,850	93,342
Recovery Factor, Per Cent	85	85	85	85	
Original Recoverable Gas, MMcf	18,148	26,466	16,155	18,573	79,342
Shrinkage, Fuel, etc., Per Cent	2.0	2.0	2.0	5.0 (E)	
Pipeline Gas Reserve, MMcf	17,785	25,937	15,832	17,644	77,198

Operating Company: Imperial Oil Ltd.



DEDICATED ACREAGE

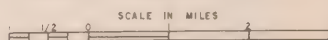
WEST OF SIXTH MERIDIAN

-LEGEND-

- ☼ GAS WELL
- OIL WELL
- ◆ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL

— PRINCIPAL ROADS

BELLOY AREA ALBERTA

DEDICATED ACREAGE
SHOWING ASSIGNED RESERVES

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1997

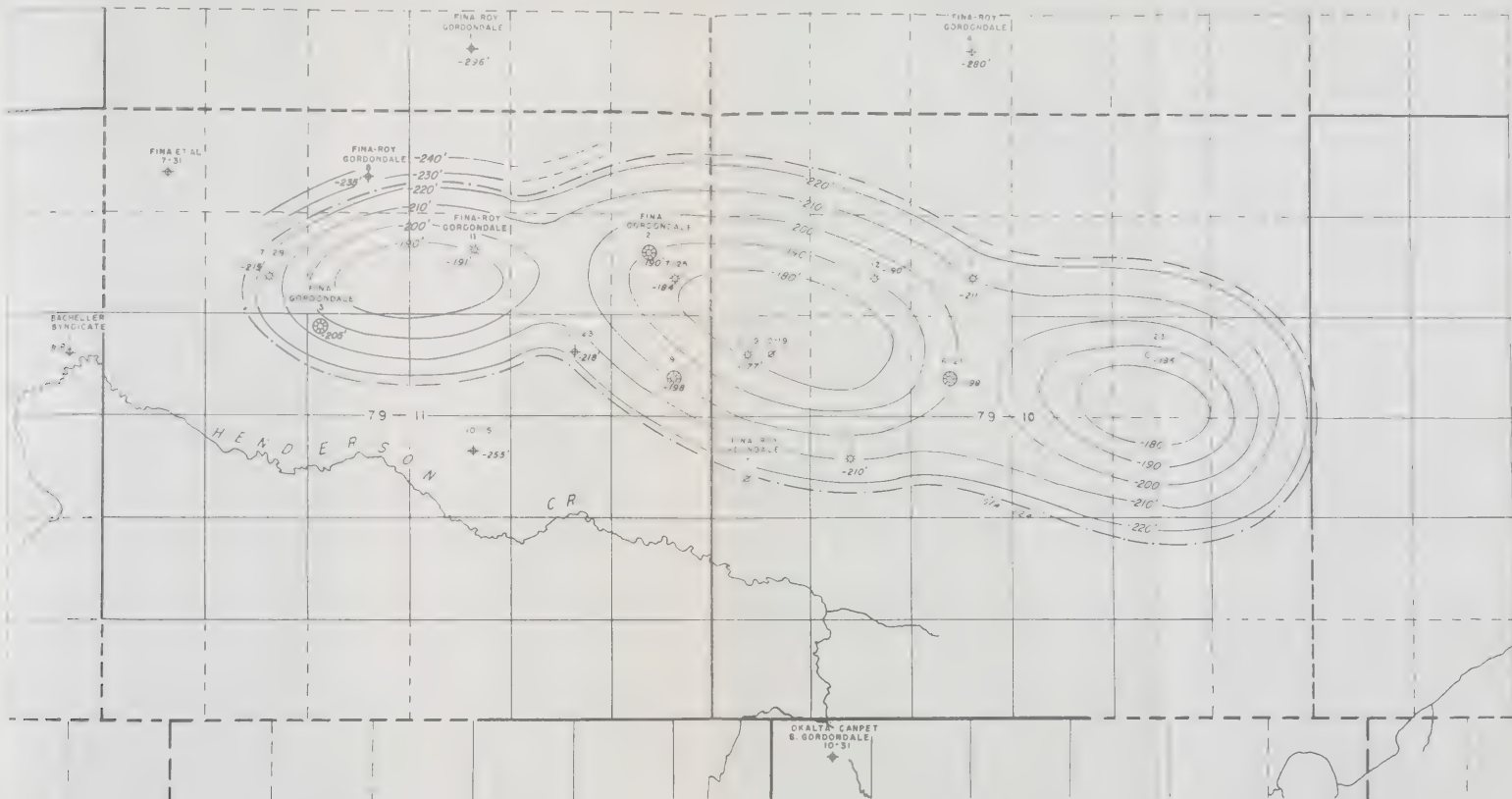
CALGARY, ALTA

GORDONDALE FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

Reservoir	CADOTTE	Well #5 NOTIKEWIN	GETHING	West CADOMIN	East CADOMIN	TOTAL FIELD
2. Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous	
3. Average Depth, Feet	2,710	3,130	4,209	4,440	4,566	
4. Completed Gas Wells	4	1	3	2	1	
5. Proved Area, Acres	17,105	1,000	6,870	5,145	2,347	
6. Average Pay Thickness, Feet	18.4	10.0	8.8	16.7	15.4	
7. Acre - Feet	310,208	10,000	60,321	85,679	36,058	
8. Average Porosity, Per Cent	18.1	14.0 (E)	14.0	16.0	16.0	
9. Average Connate Water, Per Cent	30	30	25	30	30	
10. Initial Reservoir Pressure, psia	625	946	1,558	1,834	1,815	
11. Reservoir Temperature, Degrees R.	545	558	590	586	586	
12. Specific Gravity of Gas	.571	.594	.611	.612	.613	
13. Gas Deviation Factor	.925	.888	.858	.840	.838	
14. Original Gas in Place, Mcf/Ac. Ft.	254	288	497	642	637	
15. Original Gas in Place, MMcf	78,792	2,880	29,980	55,006	22,969	189,627
16. Recovery Factor, Per Cent	80	85	85	85	85	
17. Original Recoverable Gas, MMcf	63,034	2,448	25,483	46,775	19,524	157,264
18. Shrinkage, Fuel, etc., Per Cent	2.0	2.0	2.0	2.0	2.0	
19. Pipeline Gas Reserve, MMcf	61 773	2,399	24,973	45,840	19,134	154,119

Operating Company: Canadian Fina Oil Limited



WEST OF SIXTH MERIDIAN

- LEGEND -

- ☀ GAS WELL
 ● OIL WELL
 ◆ DRY & ABANDONED
 ⦿ COMPLETED WELL IN THIS ZONE
 ⚡ SUSPENDED WELL:
 — PRINCIPAL ROADS

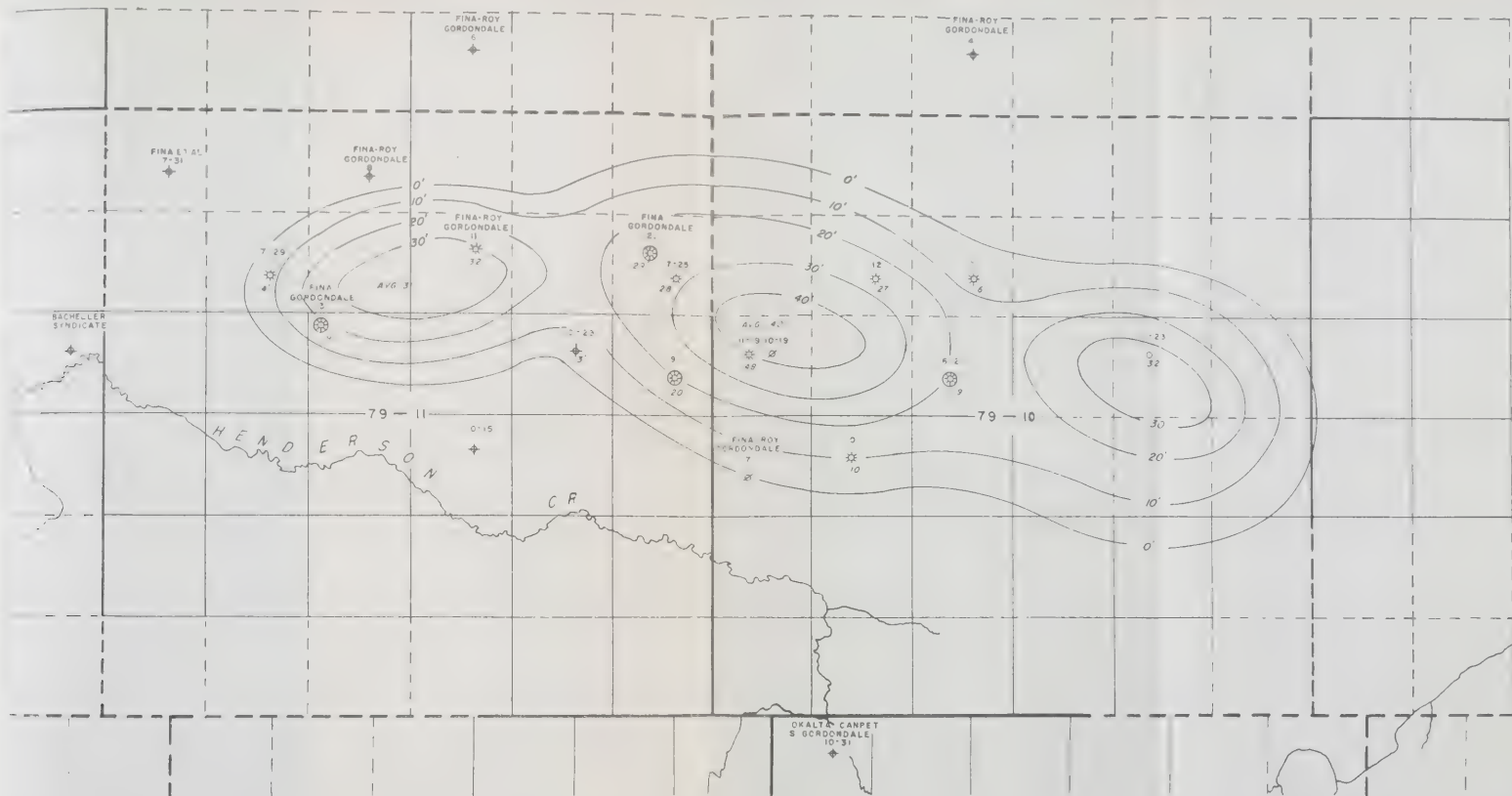
GORDONDALE AREA
ALBERTA

STRUCTURE MAP
CONTOURS ON TOP OF
CADOTTE SANDSTONE

WESTCOAST TRANSMISSION CO

SEPT. 1, 1957

CALGARY, ALTA.



WEST OF SIXTH MERIDIAN

-LEGEND-

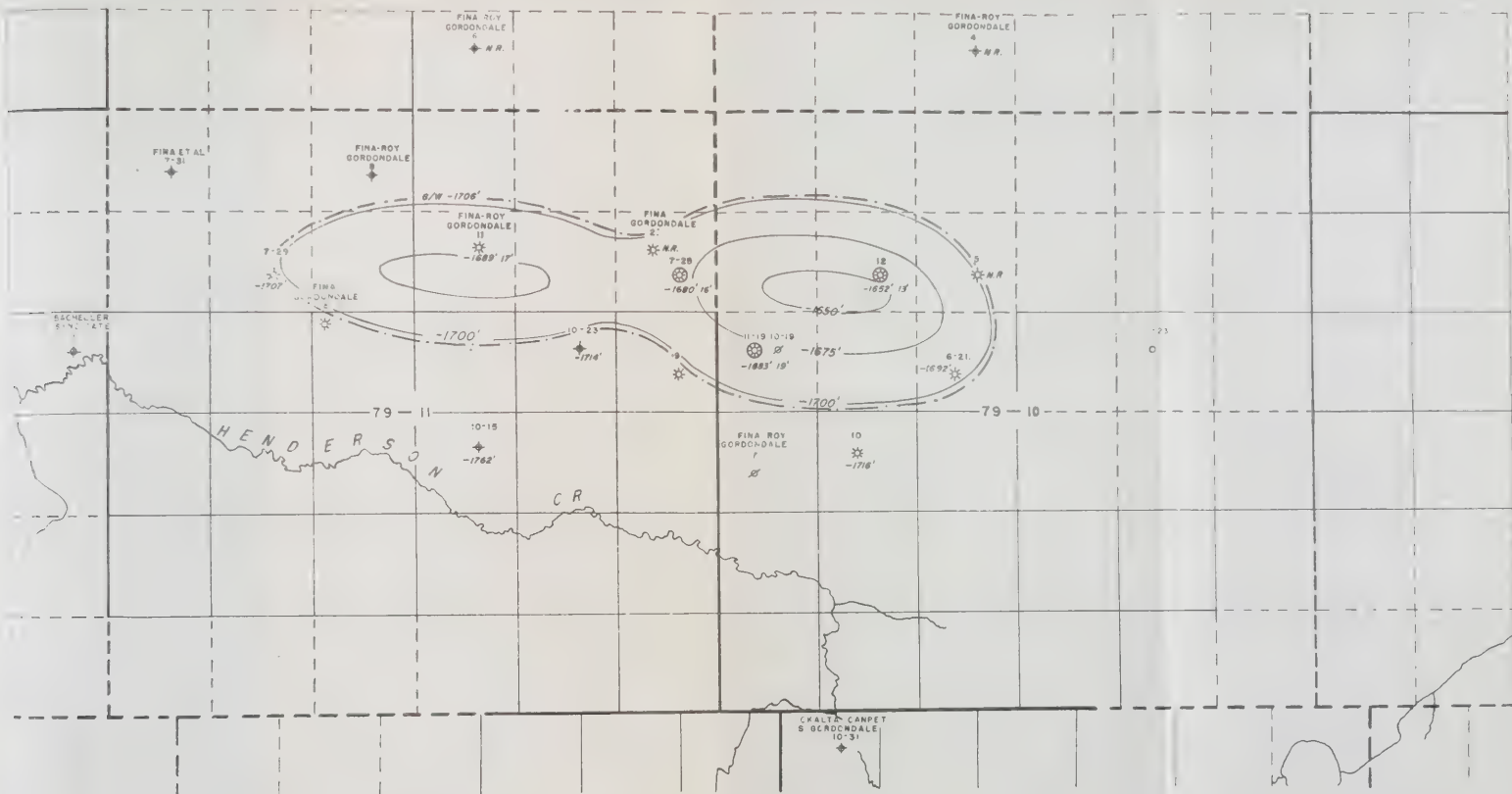
- ★ GAS WELL
- OIL WELL
- ◆ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

GORDONDALE AREA
ALBERTAISOPACHOUS MAP
CADOTTE SANDSTONE

SCALE IN MILES

WESTCOAST TRANSMISSION CO.

CALGARY, ALTA.



WEST OF SIXTH MERIDIAN

-LEGEND-

- * GAS WELL
- OIL WELL
- ◆ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⌘ SUSPENDED WELL
- PRINCIPAL ROADS

GORDONDALE AREA
ALBERTASTRUCTURE MAP
GETTING SANDSTONE

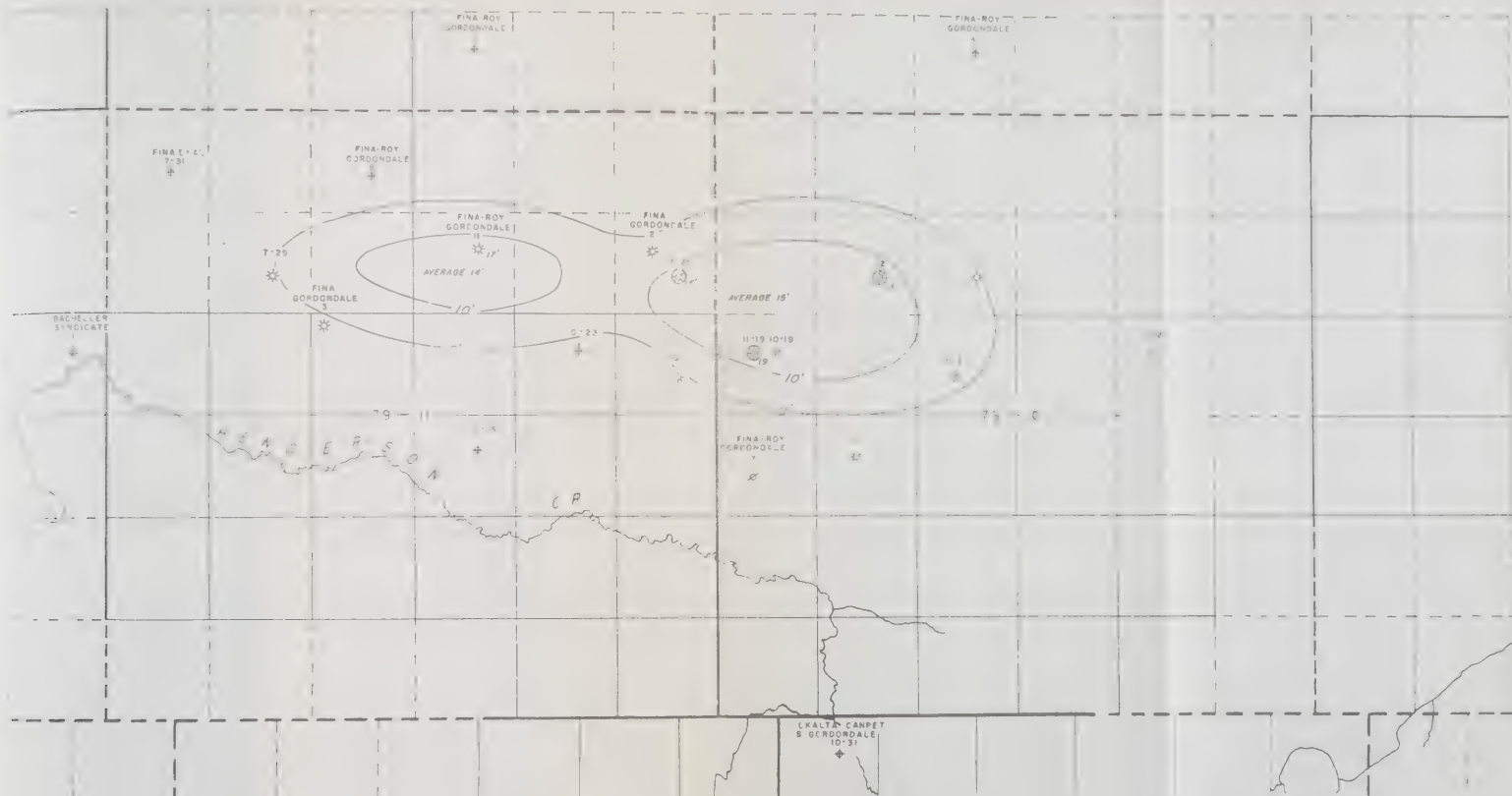
SCALE IN MILES

1 1/2 0 1

WESTCOAST TRANSMISSION CO.

SEPT 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

GORDONDALE AREA
ALBERTAISOPACHOUS MAP
GETTING SANDSTONE

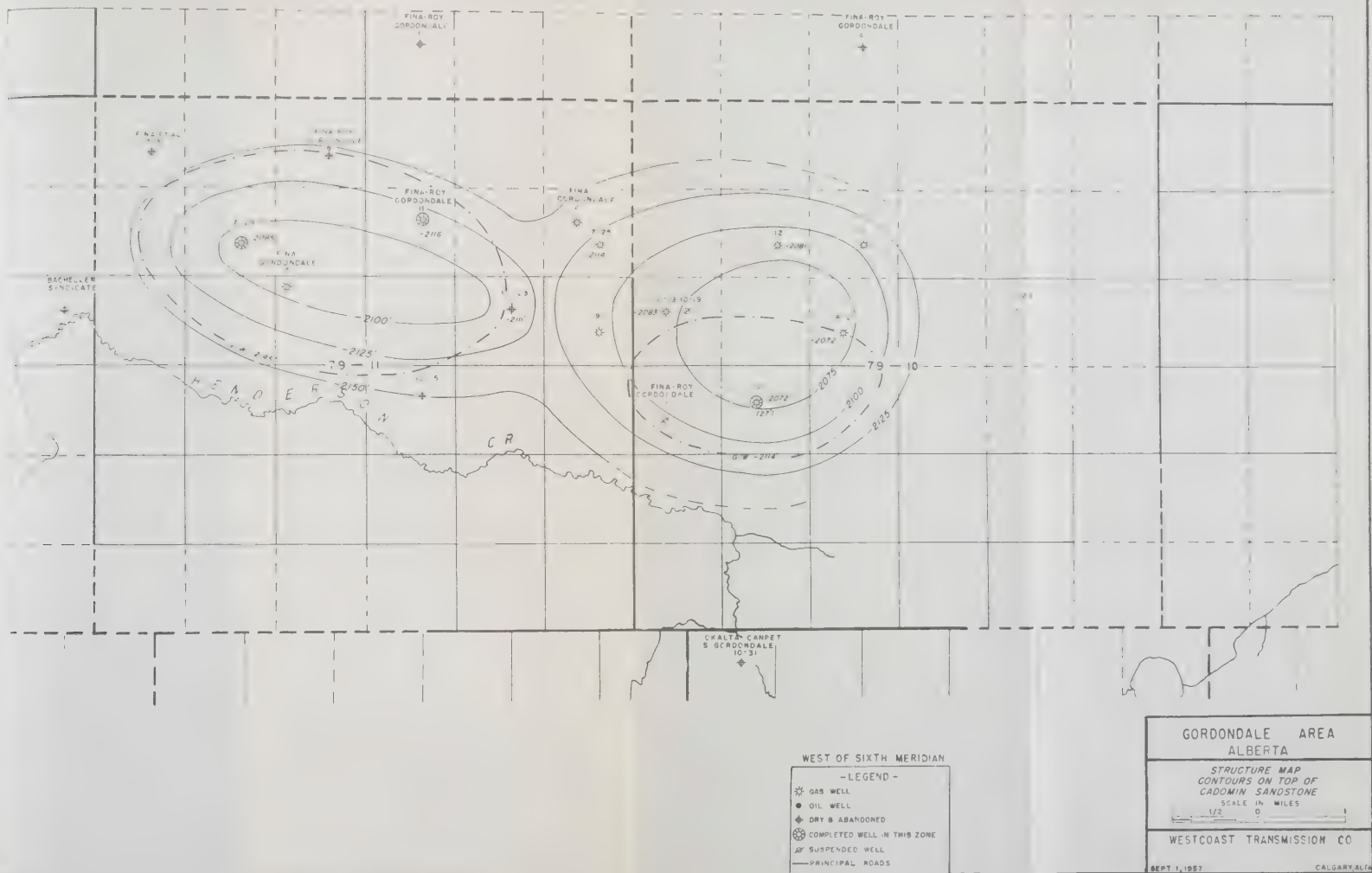
SCALE IN MILES

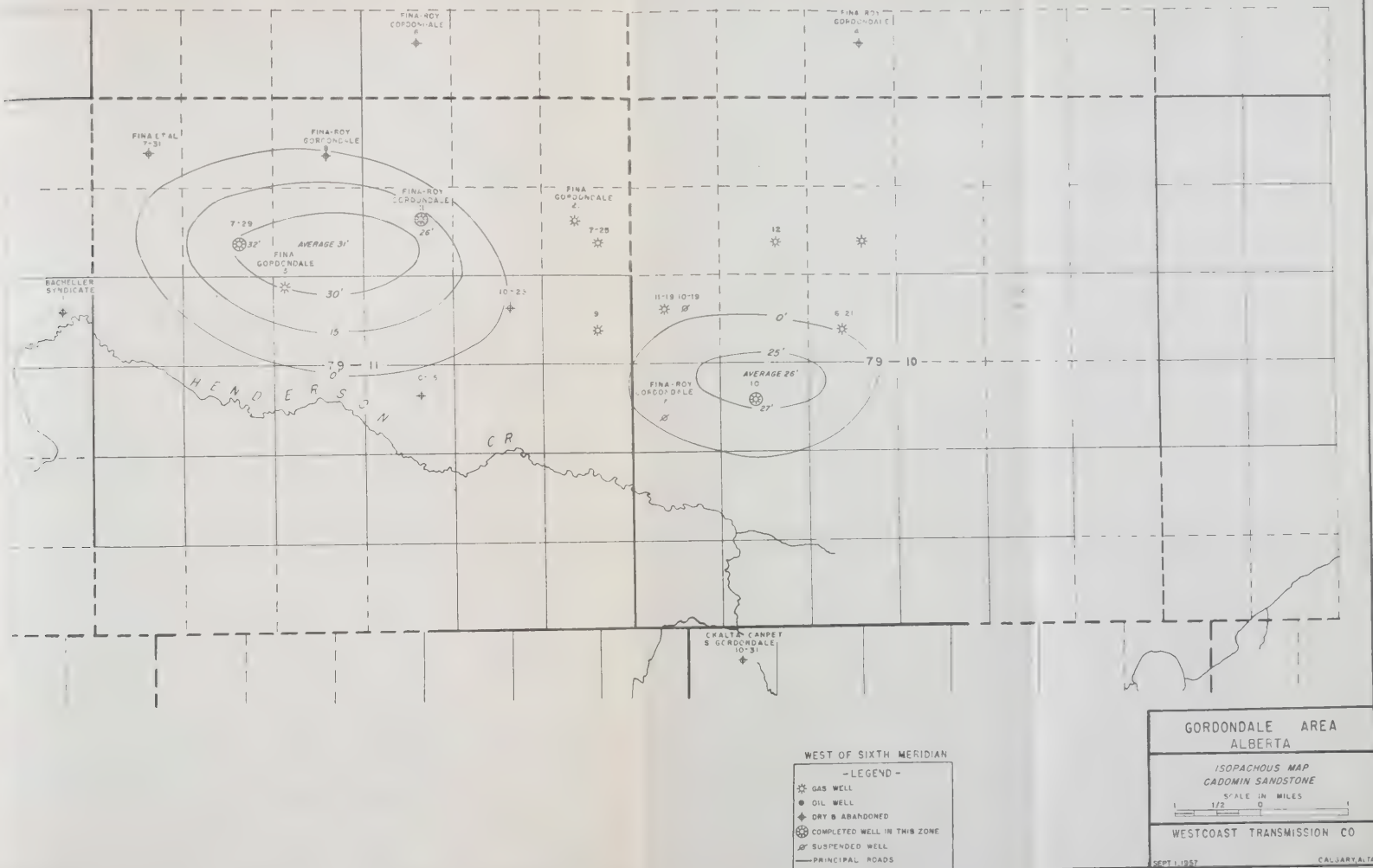
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WESTCOAST TRANSMISSION CO.

SEPT. 1, 1957

CALGARY, ALTA.



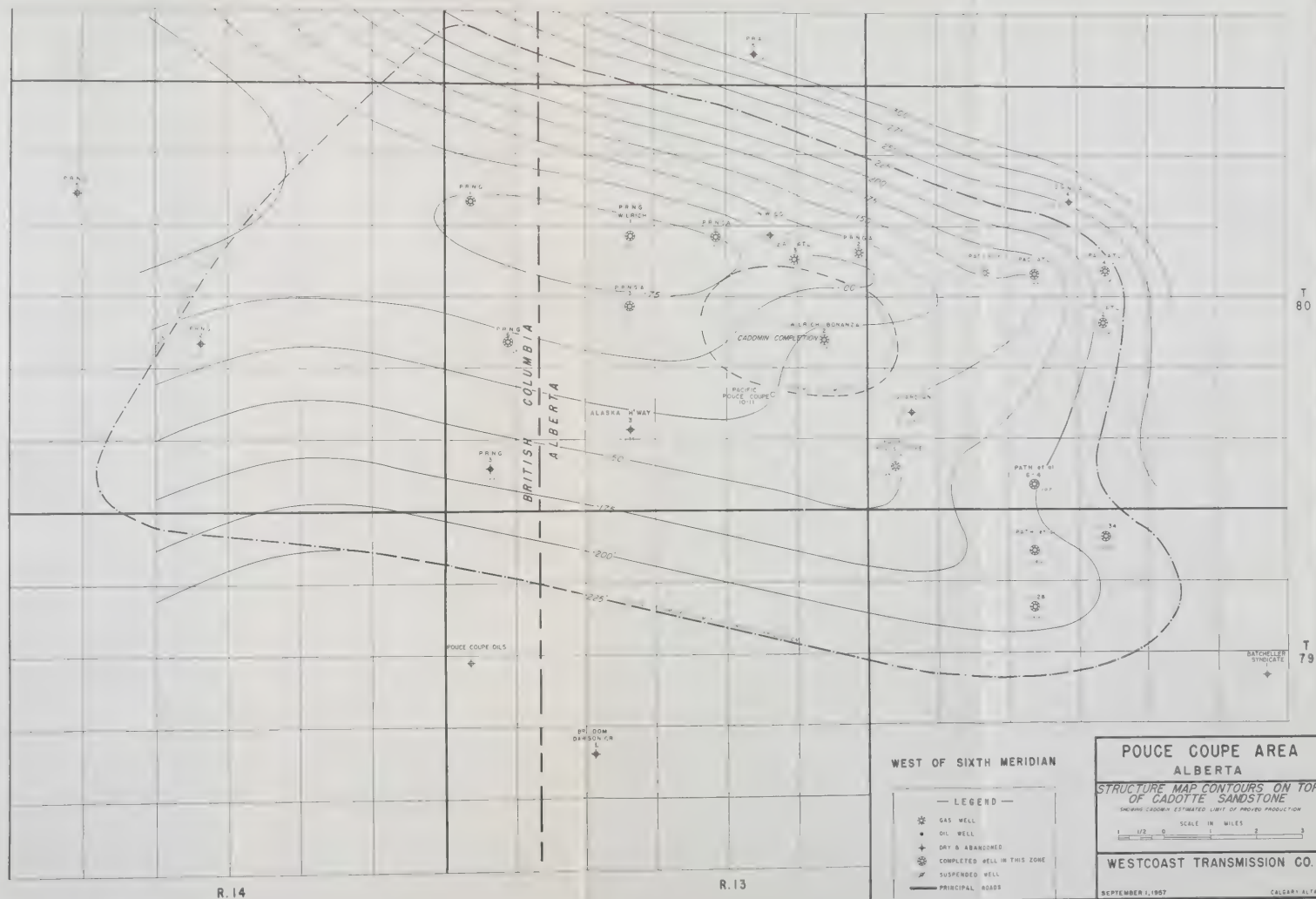


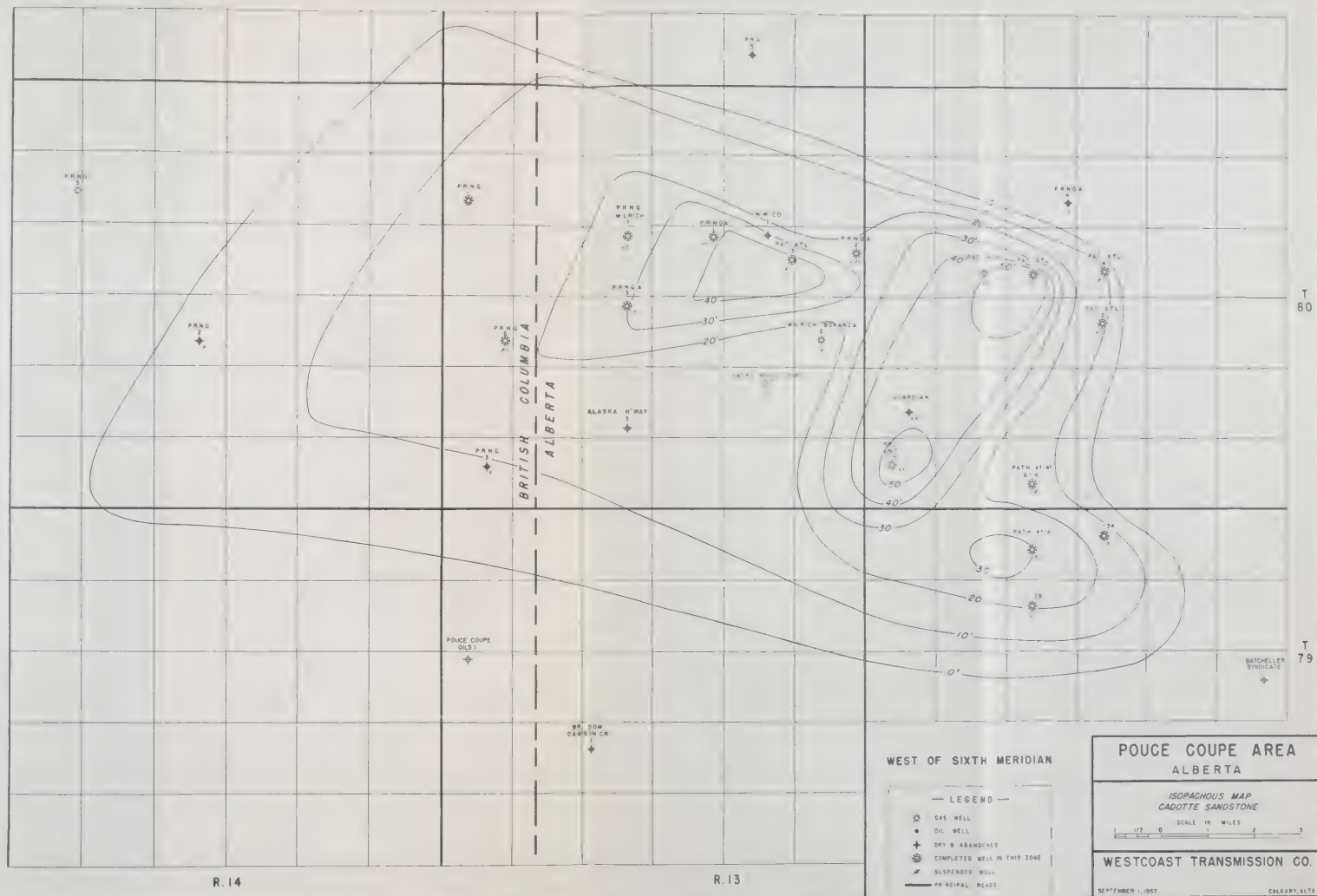
POUCE COUPE FIELDALBERTA & BRITISH COLUMBIA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

1. Reservoir	CADOTTE	CADOMIN	TOTAL FIELD
2. Geologic Age	L. Cretaceous	L. Cretaceous	
3. Average Depth, Feet	2,225	4,210	
4. Completed Gas Wells	16	1	
5. Proved Area, Acres	59,863	2,500	
6. Average Pay Thickness, Feet	16.3	13.0	
7. Acre - Feet	973,943	32,500	
8. Average Porosity, Per Cent	19.2	15.0	
9. Average Connate Water, Per Cent	30	30	
10. Initial Reservoir Pressure, psia	617	1,780	
11. Reservoir Temperature, Degrees R.	550	583	
12. Specific Gravity of Gas	.576	.610	
13. Gas Deviation Factor	.925	.838	
14. Original Gas in Place, Mcf/Ac.Ft.	251	588	
15. Original Gas in Place, MMcf	244,460	19,094	263,554
16. Recovery Factor, Per Cent	85	75	
17. Original Recoverable Gas, MMcf	207,791	14,321	222,112
18. Shrinkage, Fuel, etc., Per Cent	2.0	2.0	
19. Pipeline Gas Reserve, MMcf	203,635	14,035	217,670

Operating Company: Pacific Petroleum Ltd.





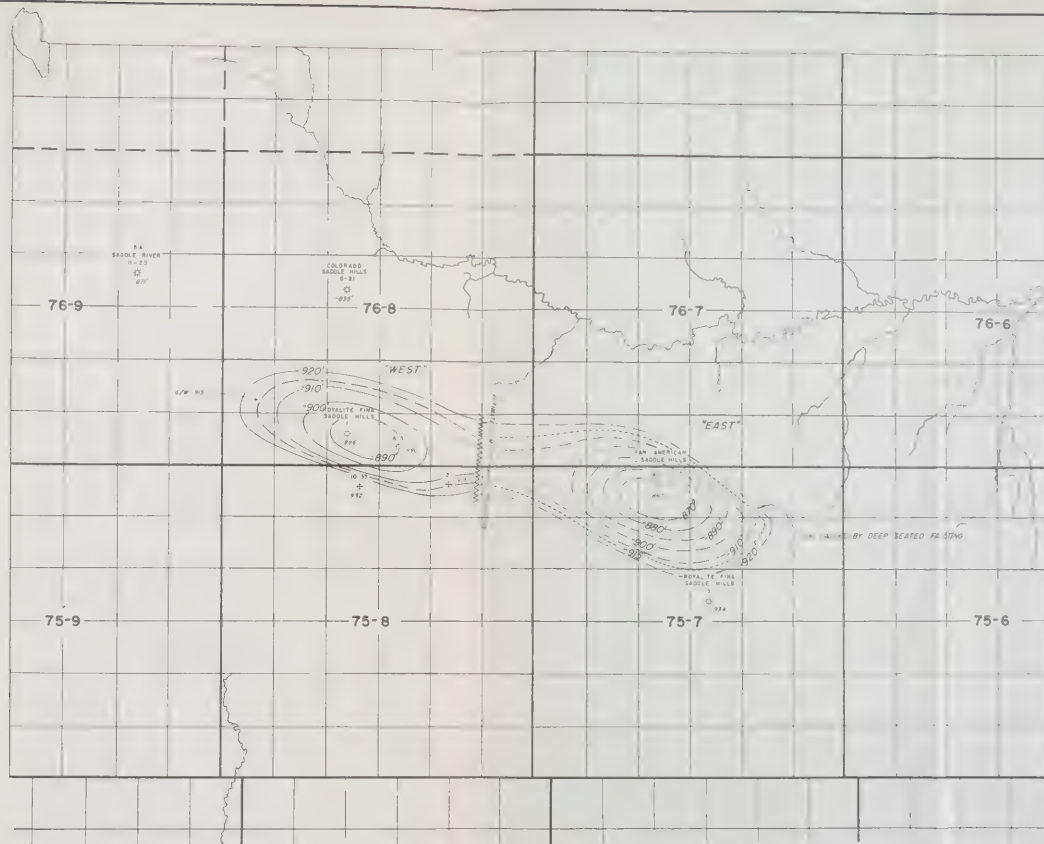
SADDLE HILLS FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

Reservoir	West CADOTTE	East CADOTTE	Well # 3 BASAL GETTING	Pan-American E. Saddle Hills A-1 PERMO-PENN	TOTAL FIELD
Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	Permo-Penn	
3. Average Depth, Feet	3,875	3,600	5,795	6,950	
Completed Gas Wells	2	0*	1	0*	
Proved Area, Acres	3,917	1,500	1,000	2,000	
6. Average Pay Thickness, Feet	9.5	24.0	6.0	30.0	
7. Acre - Feet	37,124	36,000	6,000	60,000	
8. Average Porosity, Per Cent	14.8	14.8 (E)	14.0 (E)	10.0 (E)	
9. Average Connate Water, Per Cent	30	30	30	25	
10. Initial Reservoir Pressure, psia	931	914	2,130 (E)	2,835 (E)	
11. Reservoir Temperature, Degrees R.	572	571	600	615	
12. Specific Gravity of Gas	.589	.589	.606 (E)	.690 (E)	
13. Gas Deviation Factor	.900	.900	.848	.817	
14. Original Gas in Place, Mcf/Ac. Ft.	288	283	631	651	
15. Original Gas in Place, MMcf	10,692	10,188	3,786	39,060	63,726
16. Recovery Factor, Per Cent	80	80	85	85	
17. Original Recoverable Gas, MMcf	8,554	8,150	3,218	33,201	53,123
18. Shrinkage, Fuel, etc., Per Cent	2.0	2.0	3.0	8.0 (E)	
19. Pipeline Gas Reserve, MMcf	8,383	7,987	3,121	30,545	50,036

Operating Company: Royalite Oil Company Limited

* Drilling well.



CALGARY, ALTA

SOUTH POUCE COUPE FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

Reservoir	Upper Sand DOE CREEK	Lower Sand DOE CREEK	CADOTTE ZONE I A1	CADOTTE ZONE I A2	CADOTTE ZONE II B	CADOTTE ZONE II C	CADOMIN
2. Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous	L. Cretaceous
3. Average Depth, Feet	1,350	1,350	3,350	3,375	3,400	3,430	5,250
4. Completed Gas Wells	0	0	6	9	3	1	1
5. Proved Area, Acres	8,564	4,460	8,480	29,198	3,696	17,431	3,022
6. Average Pay Thickness, Feet	7.0	4.5	11.5	17.4	7.6	11.7	17.0
7. Acre - Feet	59,638	20,033	98,558	508,161	28,174	204,056	51,378
8. Average Porosity, Per Cent	25.0	25.0	16.4	17.1	13.8	16.1	10.0
9. Average Connate Water, Per Cent	25	25	30	30	35	30	40
10. Initial Reservoir Pressure, psia	339	339	794	804	824	834	1,974
11. Reservoir Temperature, Degrees R.	540	540	558	559	560	561	592
12. Specific Gravity of Gas	.585	.585	.600	.600	.600	.600	.625
13. Gas Deviation Factor	.951	.951	.900	.858	.898	.899	.835
14. Original Gas in Place, Mcf/Ac.Ft.	190	190	279	309	226	409	368
15. Original Gas in Place, MMcf	11,331	3,806	27,498	157,022	6,367	83,459	18,907
16. Recovery Factor, Per Cent	75	75	85	85	85	80	75
17. Original Recoverable Gas, MMcf	8,498	2,855	23,373	133,469	5,412	66,767	14,180
18. Shrinkage, Fuel, etc., Per Cent	2.0	2.0	2.0	2.0	2.0	2.0	3.0
19. Pipeline Gas Reserve, MMcf	8,328	2,798	22,906	130,800	5,304	65,432	13,755
% Dedicated to Westcoast	100*	100*	100	67.43	100	46.04	100

Operating Company: Pacific Petroleum Ltd.

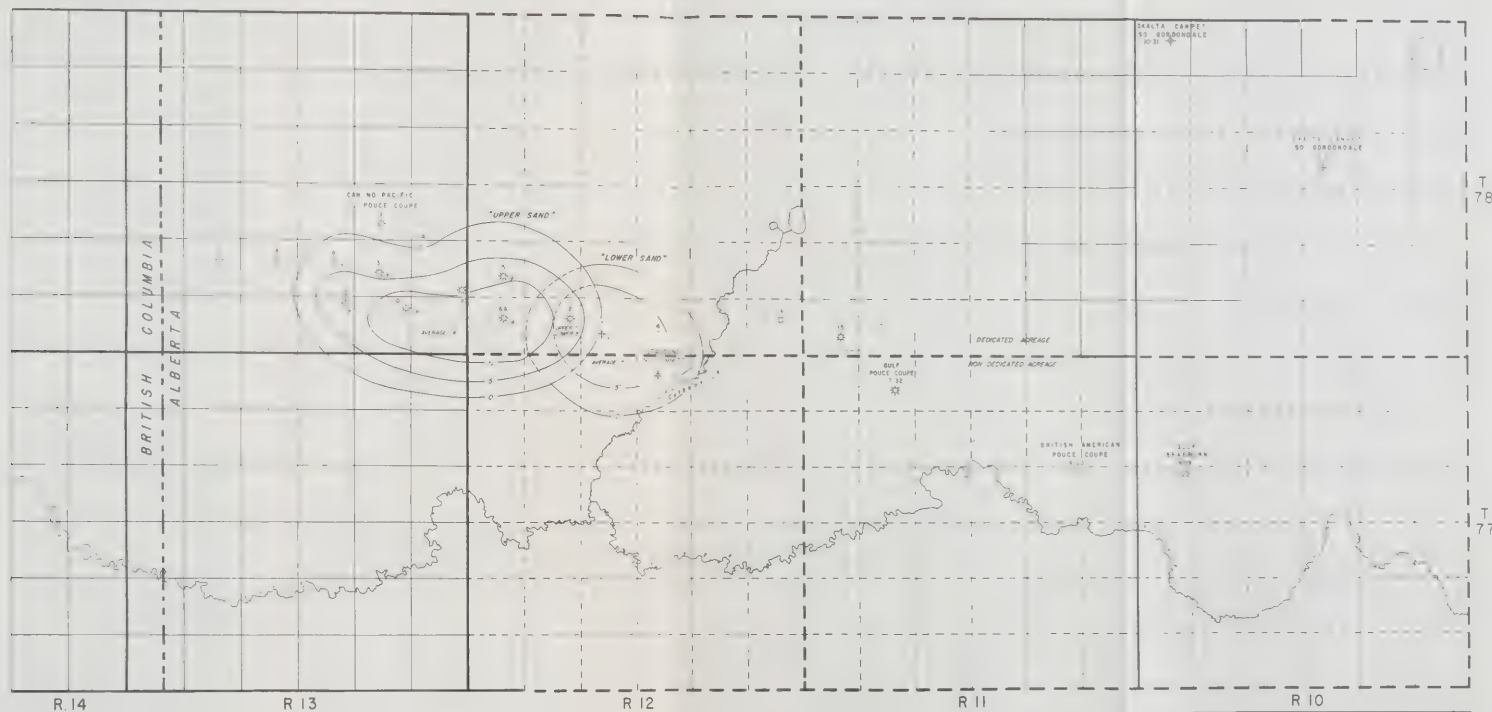
* 100% effective since offset locations not feasible

SOUTH POUCE COUPE FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

Gas Volumes at 14.73 psia and 60° F.

	"A" ZONE	TOTAL FIELD	TOTAL DEDICATED
1. Reservoir			
2. Geologic Age	Triassic		
3. Average Depth, Feet	5,825		
4. Completed Gas Wells	0		
5. Proved Area, Acres	1,579		
6. Average Pay Thickness, Feet	17.2		
7. Acre - Feet	27,096		
8. Average Porosity, Per Cent	14.5		
9. Average Connate Water, Per Cent	20		
10. Initial Reservoir Pressure, psia	2,264		
11. Reservoir Temperature, Degrees R.	601		
12. Specific Gravity of Gas	.667 (E)		
13. Gas Deviation Factor	.809		
14. Original Gas in Place, Mcf/Ac.Ft.	831		
15. Original Gas in Place, MMcf	22,517	330,907	223,400
16. Recovery Factor, Per Cent	85		
17. Original Recoverable Gas, MMcf	19,139	273,693	194,195
18. Shrinkage, Fuel, etc., Per Cent	10.0 (E)		
19. Pipeline Gas Reserve, MMcf	17,225	266,548	188,639
% Dedicated to Westcoast	100		

Operating Company: Pacific Petroleum Ltd.



WEST OF SIXTH MERIDIAN

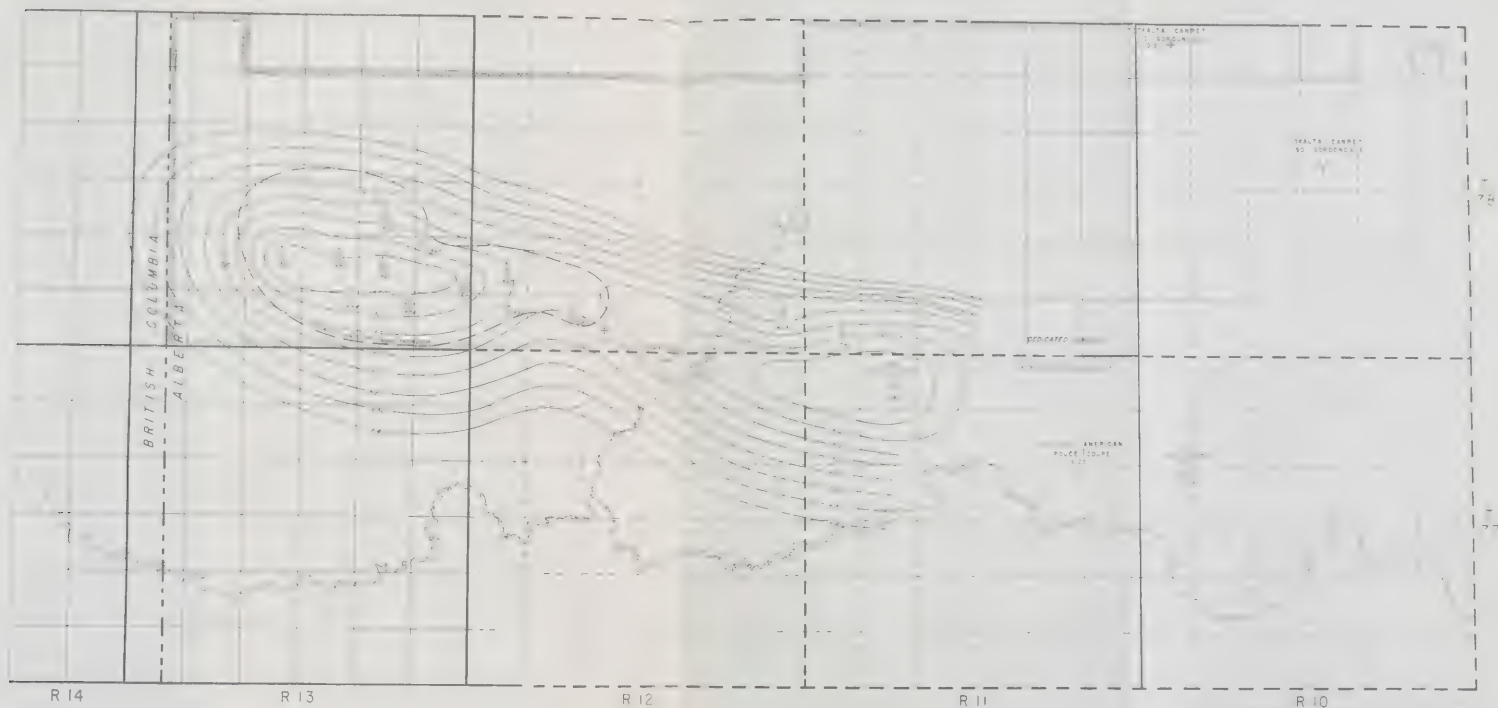
SOUTH POUCE COUPE AREA
ALBERTATOPOGRAPHIC MAP
DOUGLAS CREEK
"UPPER" & "LOWER" SANDS

SCALE IN MILES

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA.



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- O-I WELL
- + DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

SOUTH POUCE COUPE AREA
ALBERTA

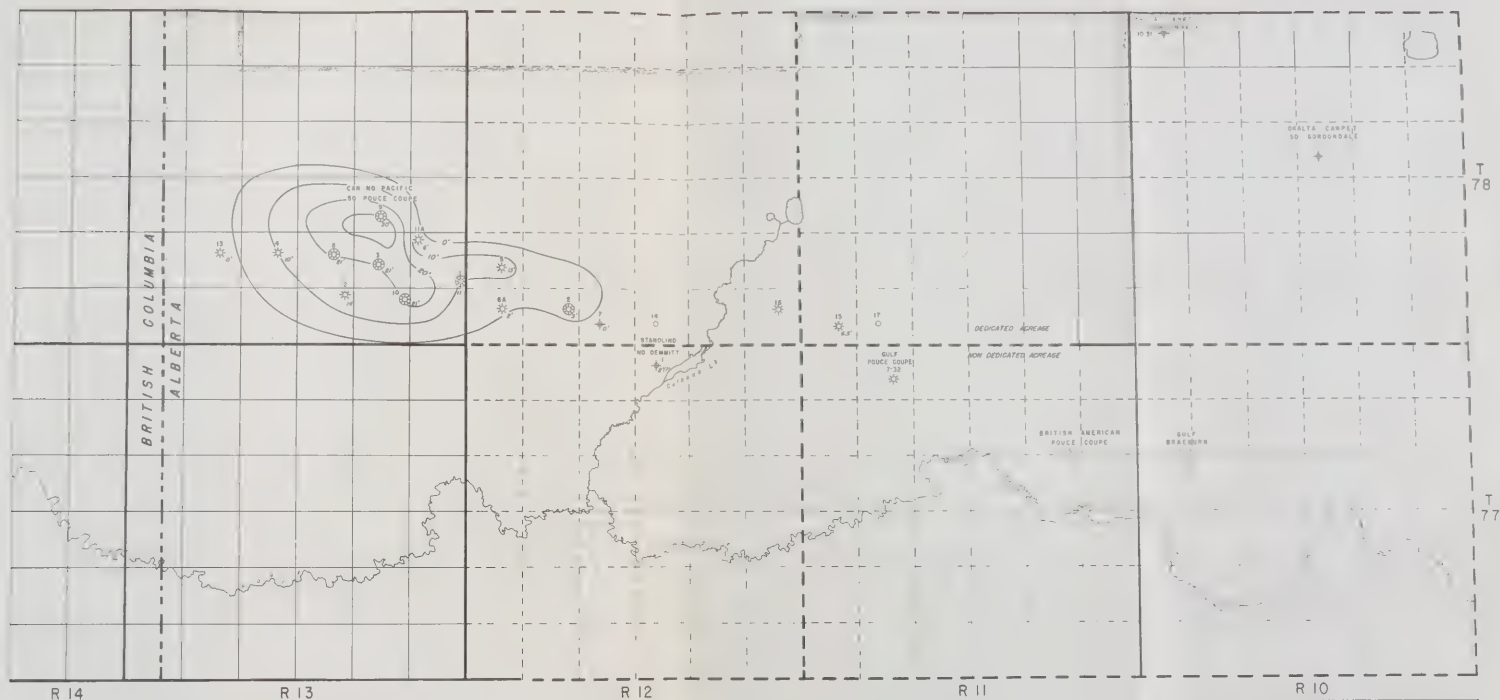
STRUCTURE MAP
CONTAINS ON TOP OF CARBONATE SANDSTONE
ZONE 2, 4, 1"

SCALE IN MILES

WESTCOAST TRANSMISSION CO.

SEPTEMBER, 1967

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

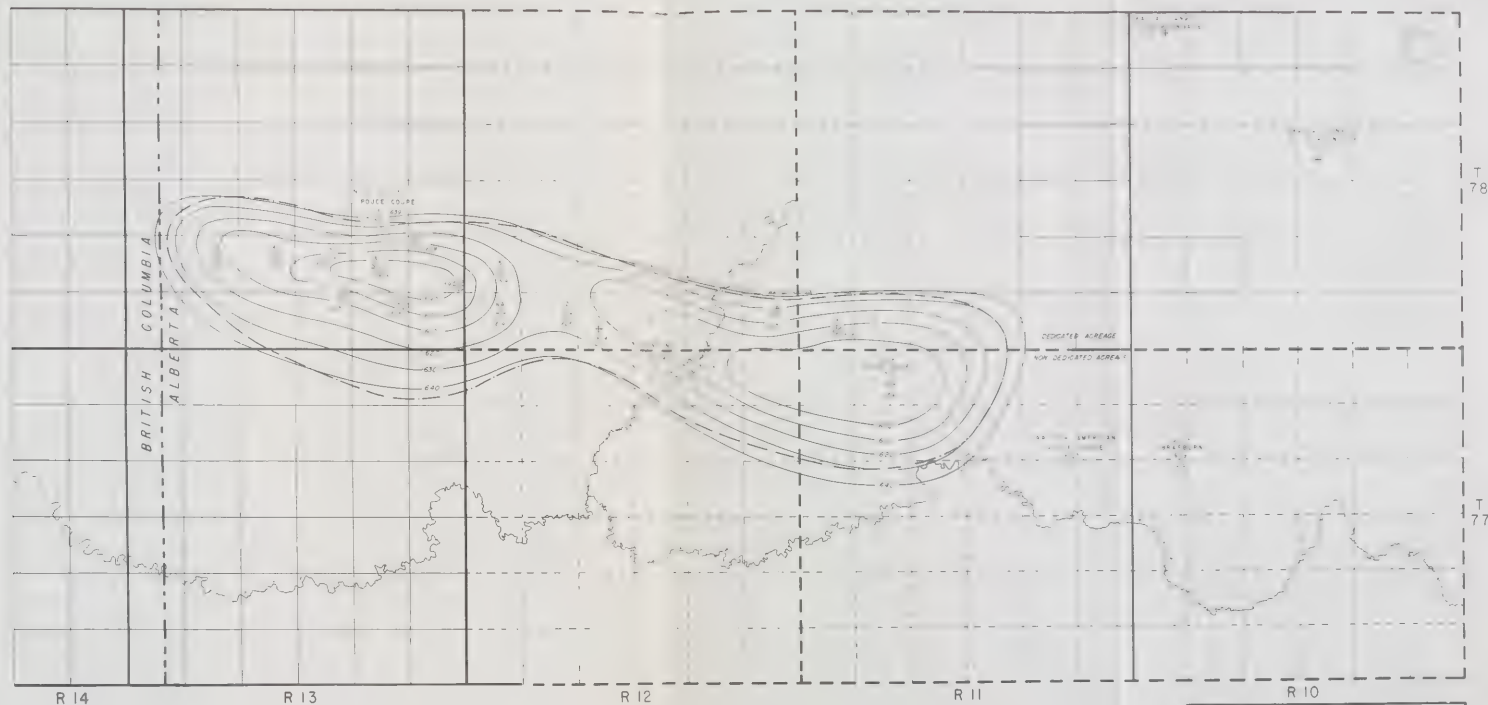
- ★ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

SOUTH POUCE COUPE AREA
ALBERTA"SPRACHOWSKI MAP"
GASOLINE SANDSTONE
"ZONE 1, A"SCALE IN MILES
1" = 1 MILE

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

—LEGEND—

- GAS WELL
- OIL WELL
- + DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- ⊗ SUSPENDED WELL
- PRINCIPAL ROADS

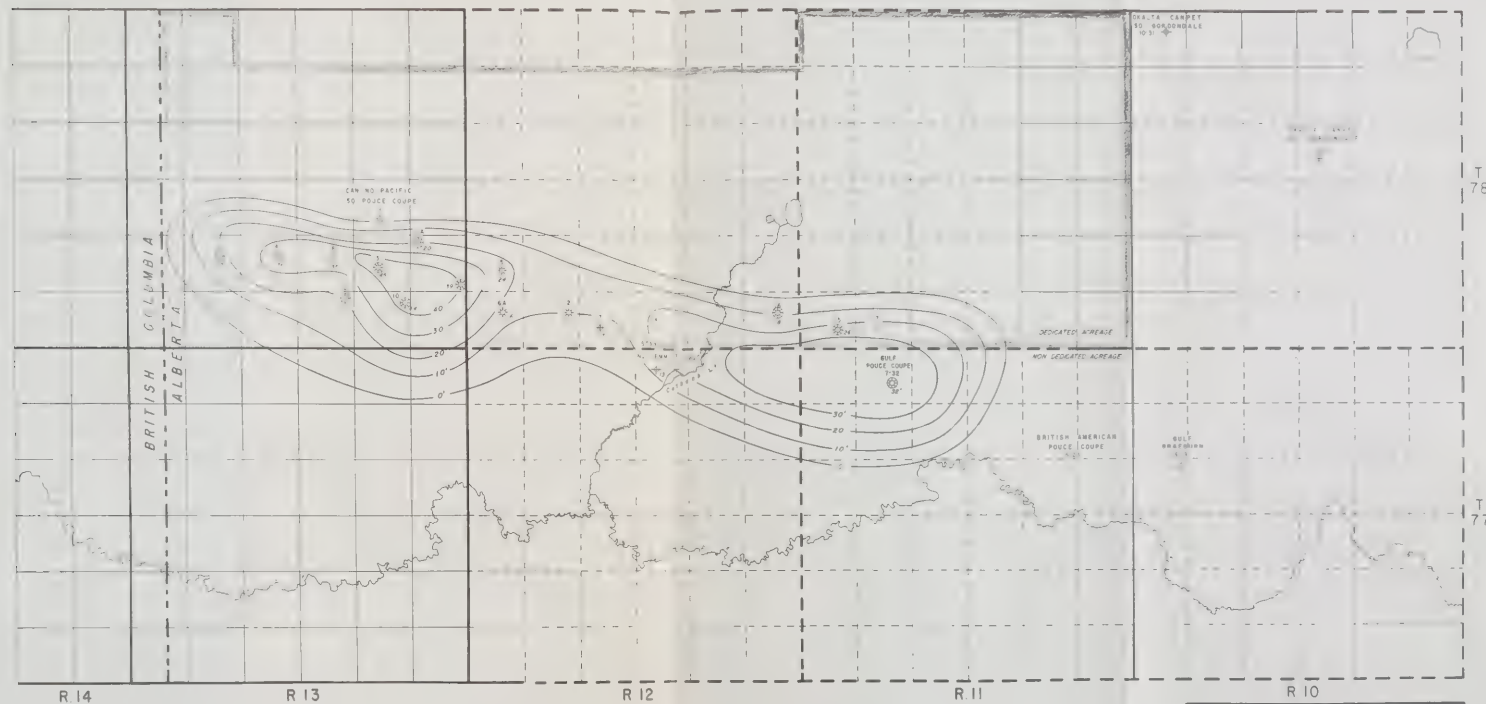
SOUTH POUCE COUPE AREA
ALBERTASTRUCTURE MAP
CONTOURS ON TOP OF GADSDILL SANDSTONE
"ZONE 2 A2"

SCALE IN MILES

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

—LEGEND—

- ★ GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊙ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

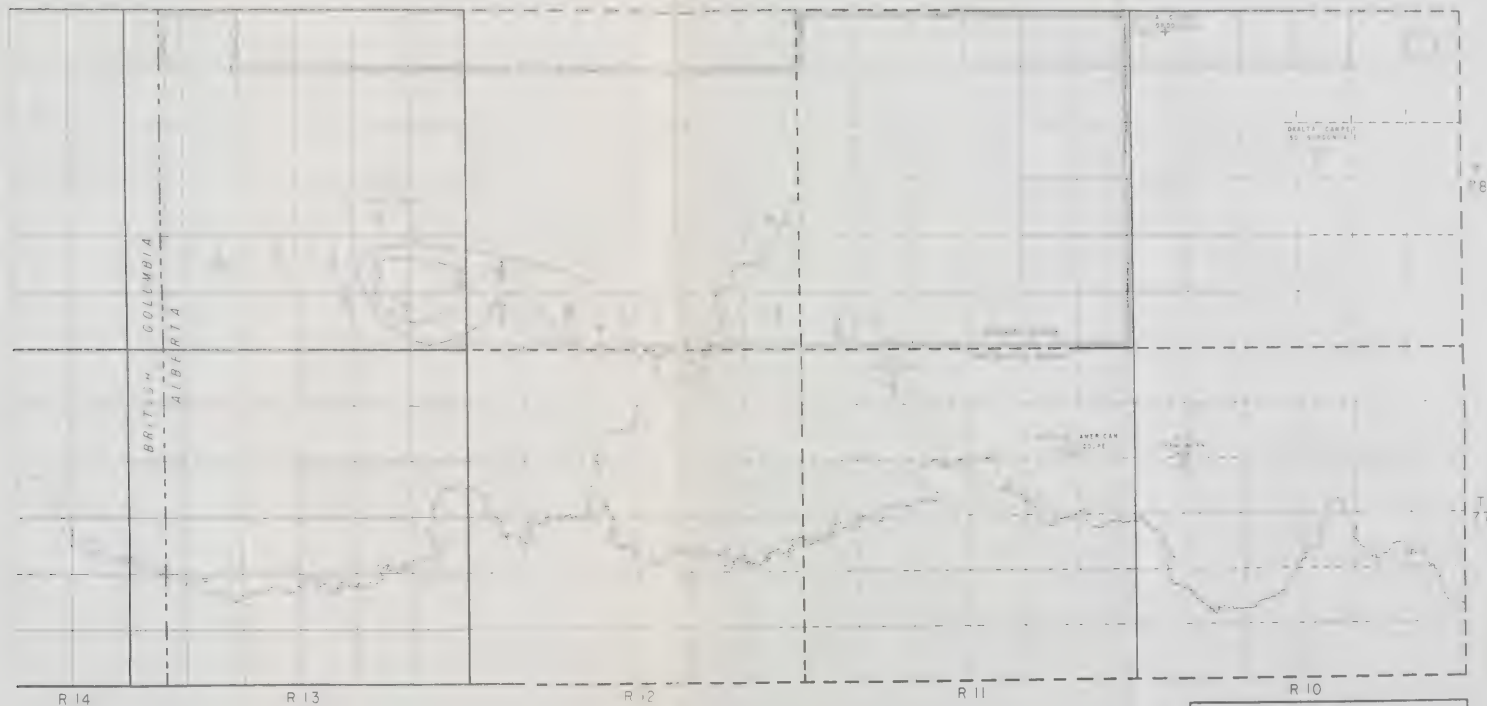
SOUTH POUCE COUPE AREA
ALBERTAISOPACHOUS MAP
GADOTTE SANDSTONE
ZONE "A"

SCALE IN MILES

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

—LEGEND—

- ★ GAS WELL
- OIL WELL
- + DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊘ SUSPENDED WELL
- PRINCIPAL ROADS

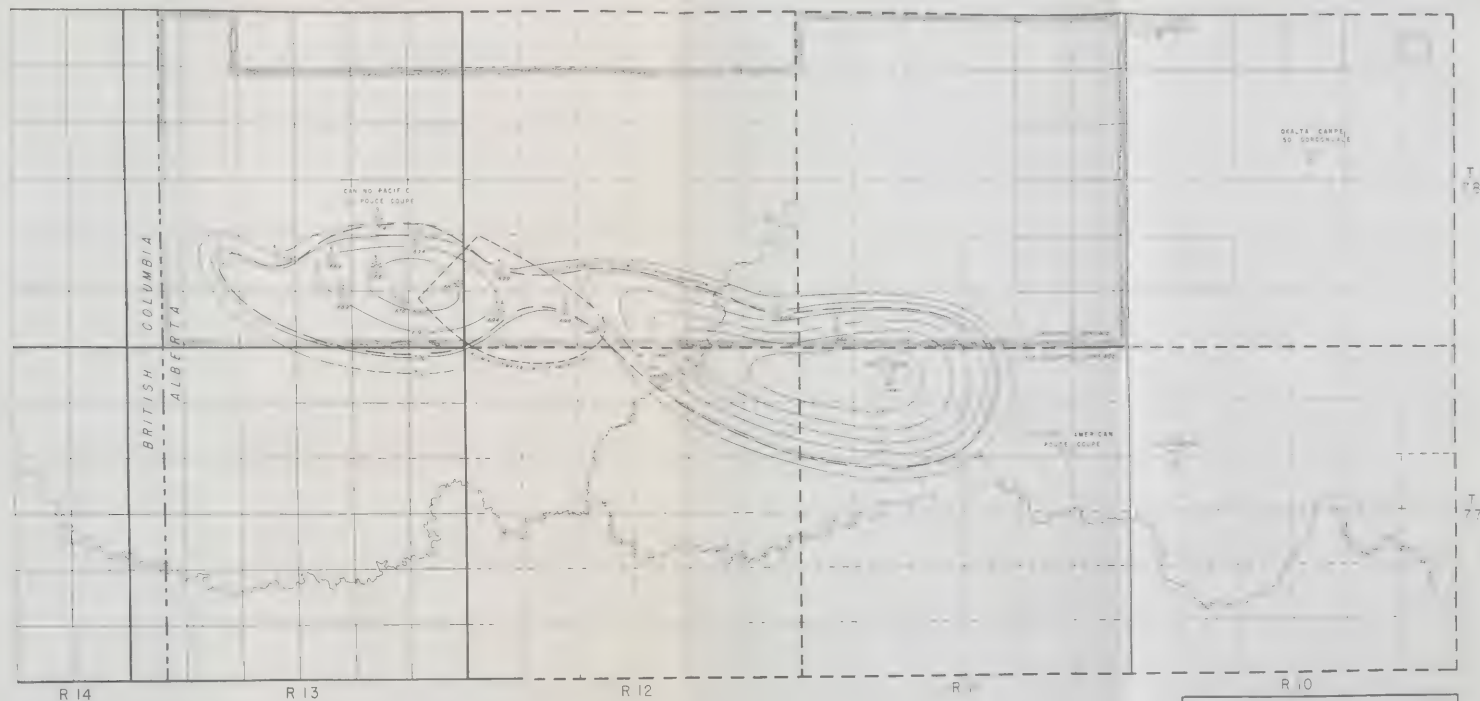
SOUTH POUCE COUPE AREA
ALBERTA
 1:50,000 MAP
 SOUTHWESTERN ALBERTA
 ZONE 4

 SCALE 1:50,000
 0 1 2 3 4 5

WESTCOAST TRANSMISSION CO.

SEPTEMBER, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- GAS WELL
- OIL WELL
- ⊕ DRY & ABANDONED
- ⊕ COMPLETED WELL IN THIS ZONE
- ⊕ SUSPENDED WELL
- PRINCIPAL ROAD

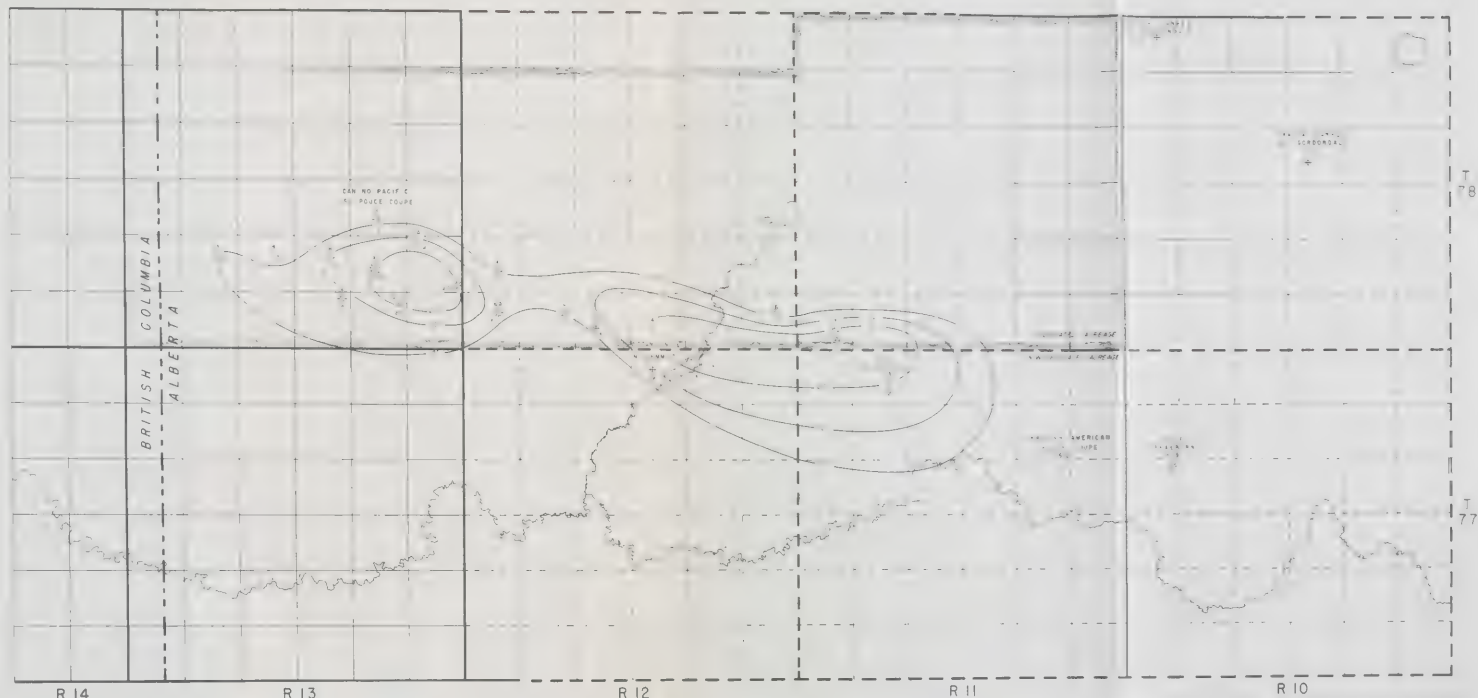
SOUTH POUCE COUPE AREA
ALBERTASTRUCTURAL MAP
CONTAINING A ZONE OF LIKELY SEISMICITY
(ZONE 12.1)

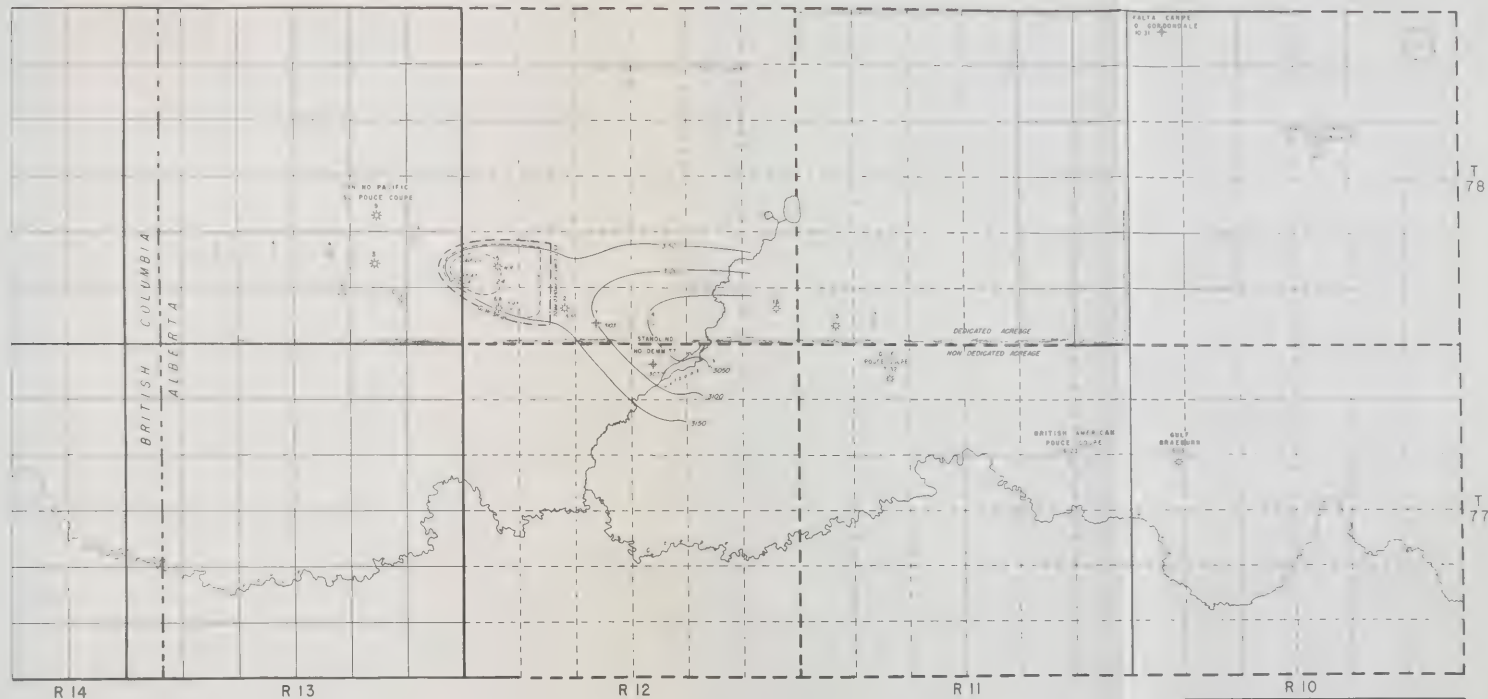
SCALE IN MILES

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA





WEST OF SIXTH MERIDIAN

SOUTH POUCE COUPE AREA ALBERTA

STRUCTURE & ISOPACHOUS MAP
CLASSIC 3"

SCALE IN MILES
0 1 2 3 4 5

WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA.

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- COMPLETED WELL IN THIS ZONE
- SUSPENDED WELL
- PRINCIPAL ROADS

WHELAW FIELDALBERTA, CANADAESTIMATED GAS RESERVES AND RESERVOIR DATA

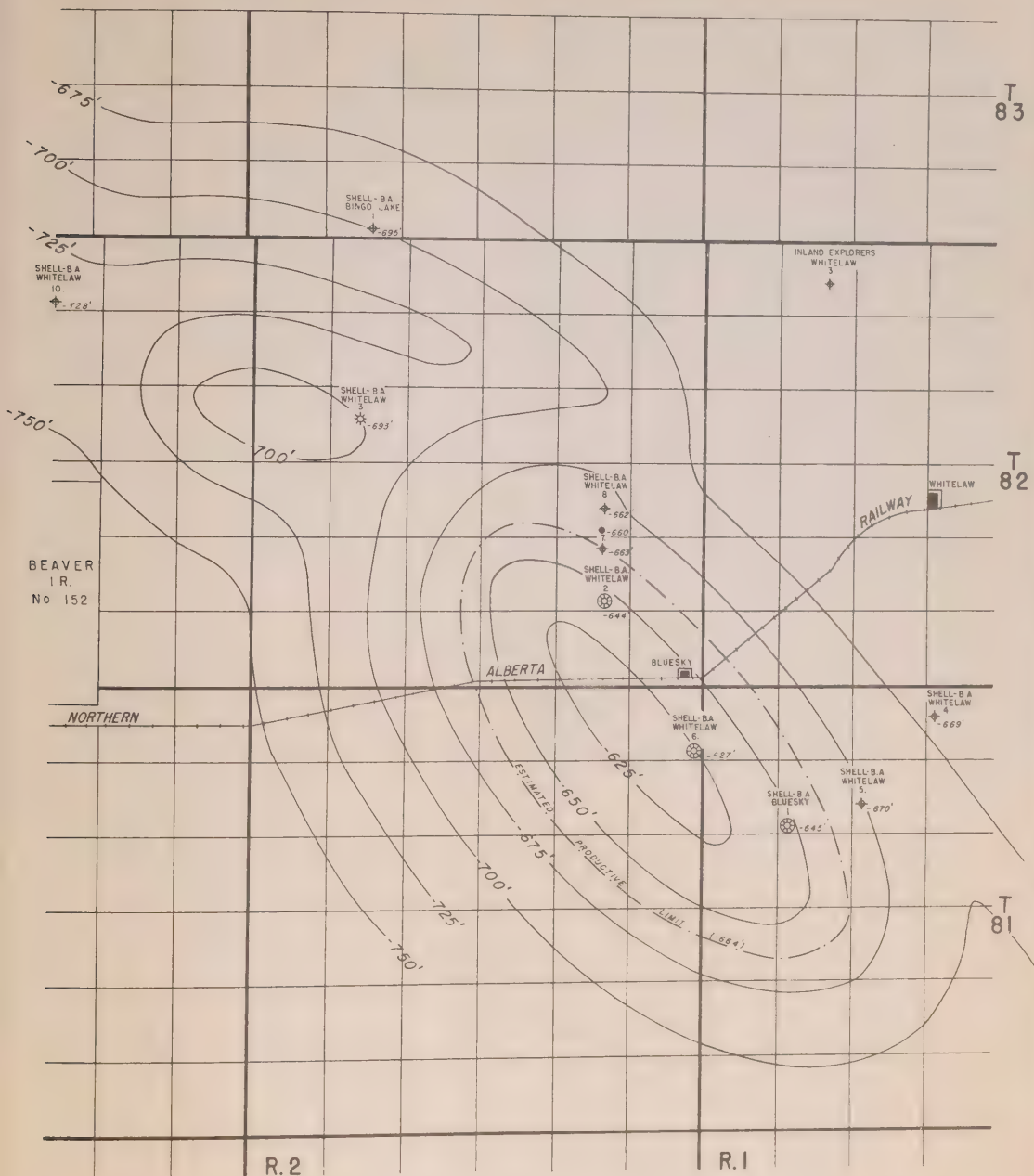
Gas Volumes at 14.73 psia and 60 ° F.

1. Reservoir	Main Structure UPPER GETHING	Main Structure MIDDLE GETHING	Well 3 Area MIDDLE GETHING	Main Structure ZONE #1	Main Structure ZONE #2	Whitlaw #1 ZONE #1,2,3	TOTAL FIELD
2. Geologic Age	L. Cretaceous	L. Cretaceous	L. Cretaceous	Triassic	Triassic	Triassic	
3. Average Depth, Feet	2,770	2,865	3,040	3,255	3,415	3,585	
4. Completed Gas Wells	3	1*	1*	0	0	0**	
5. Proved Area, Acres	11,618	9,207	3,322	15,672	2,847	500	
6. Average Pay Thickness, Feet	10.8	5.7	8.6	8.6	5.5	65	
7. Acre - Feet	126,040	52,353	28,609	135,198	15,540	32,500	
8. Average Porosity, Per Cent	20	20	20	21	21	22	
9. Average Connate Water, Per Cent	35	35	35	25	25	25	
10. Initial Reservoir Pressure, psia	1,154	1,198	1,214	1,365	1,435	1,490	
11. Reservoir Temperature, Degrees R.	559	561	562	567	570	572	
12. Specific Gravity of Gas	.575	.610	.610	.638	.668	.668	
13. Gas Deviation Factor	.881	.859	.856	.811	.822	.816	
14. Original Gas in Place, Mcf/Ac.Ft.	468.3	496.4	504.2	718.2	741.2	809.5	
15. Original Gas in Place, MMcf	59,024	25,989	14,425	97,099	11,518	26,311	234,366
16. Recovery Factor, Per Cent	85	85	85	85	85	85	
17. Original Recoverable Gas, MMcf	50,170	22,091	12,261	82,534	9,790	22,364	199,210
18. Shrinkage, Fuel, etc., Per Cent	2	2	2	4	4	4	
19. Pipeline Gas Reserve, MMcf	49,167	21,649	12,016	79,233	9,398	21,469	192,932

* Dual Completions.

** Whitlaw #1 completed as a Permo Penn oil well.

Operating Company: British American Oil Company and Shell Oil Company



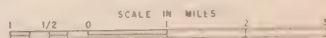
WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ✦ DRY OR ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ✱ SUSPENDED WELL
- PRINCIPAL ROADS

WHITELAW AREA ALBERTA

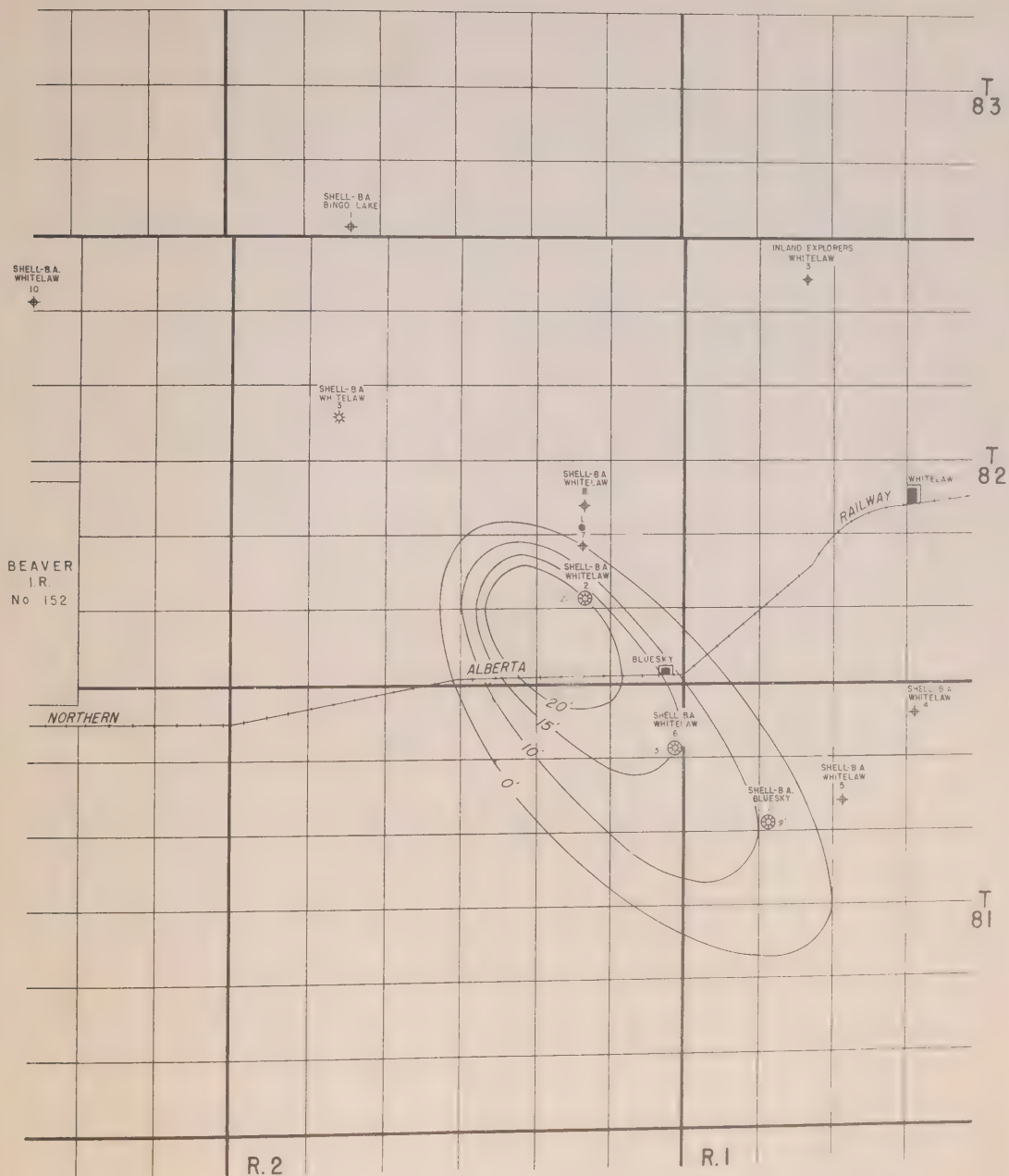
STRUCTURE MAP
CONTOURS ON TOP OF UPPER GETTING



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

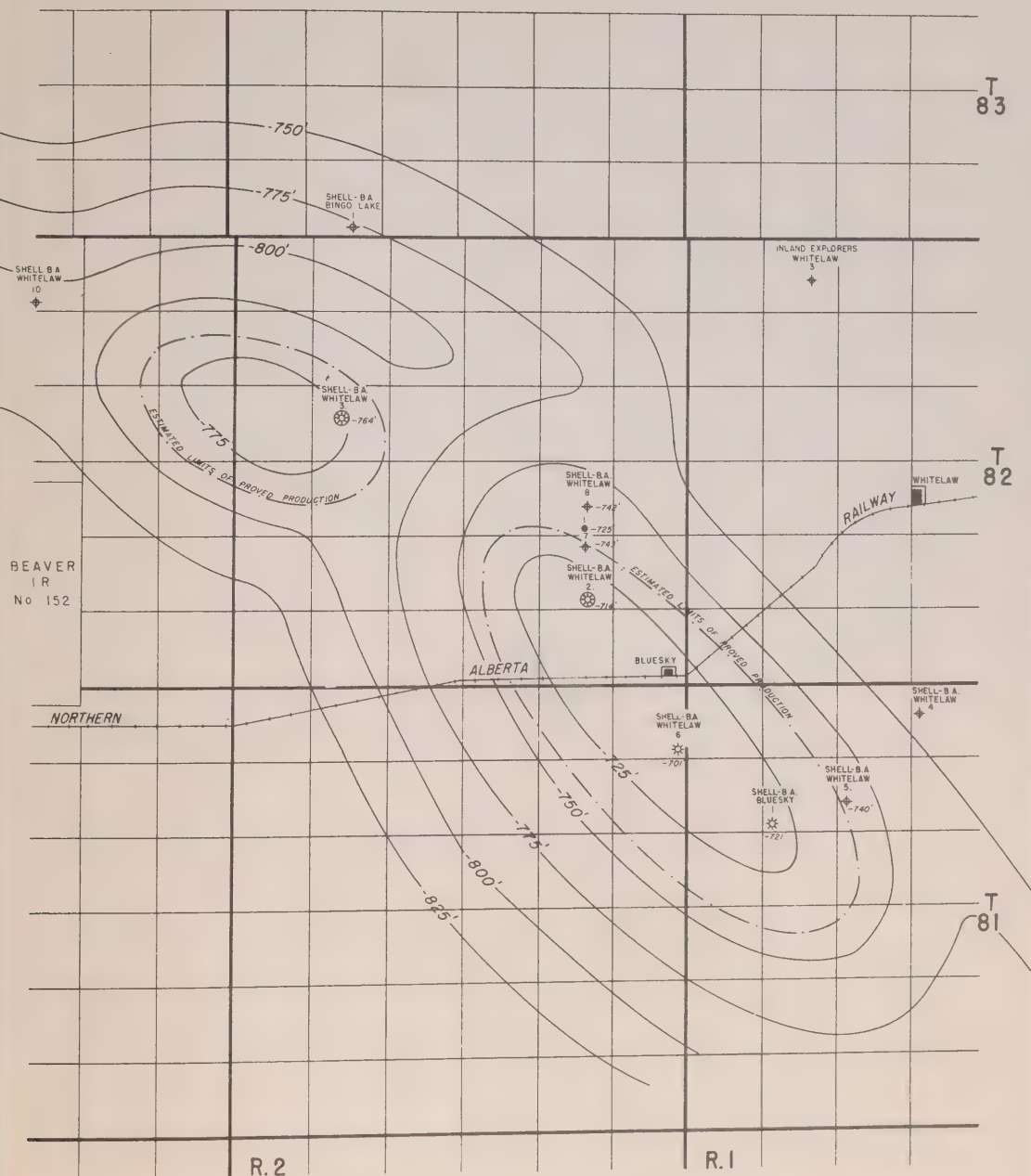
- ★ GAS WELL
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WHITELAW AREA
ALBERTAISOPACHOUS MAP
UPPER GETTINGSCALE IN MILES
1 1/2 0 2

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

CALGARY, ALTA



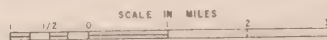
WEST OF SIXTH MERIDIAN

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- ⊙ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

WHITELAW AREA ALBERTA

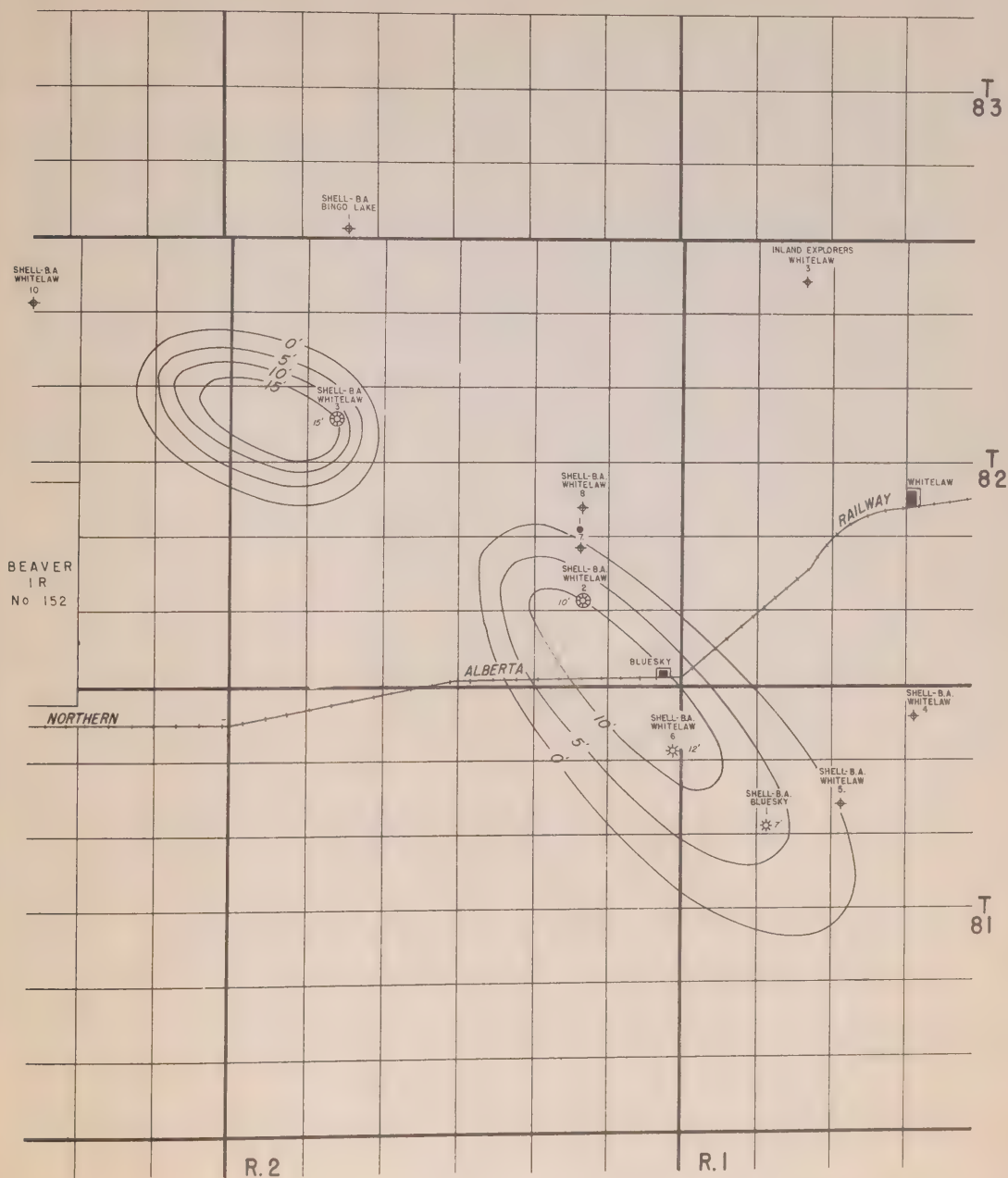
STRUCTURE MAP
CONTOURS ON TOP OF MIDDLE GETTING



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957

CALGARY, ALTA

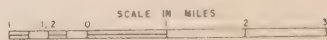


WEST OF SIXTH MERIDIAN

-LEGEND-

- ☼ GAS WELL
- OIL WELL
- ✦ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
- ⊙ SUSPENDED WELL
- PRINCIPAL ROADS

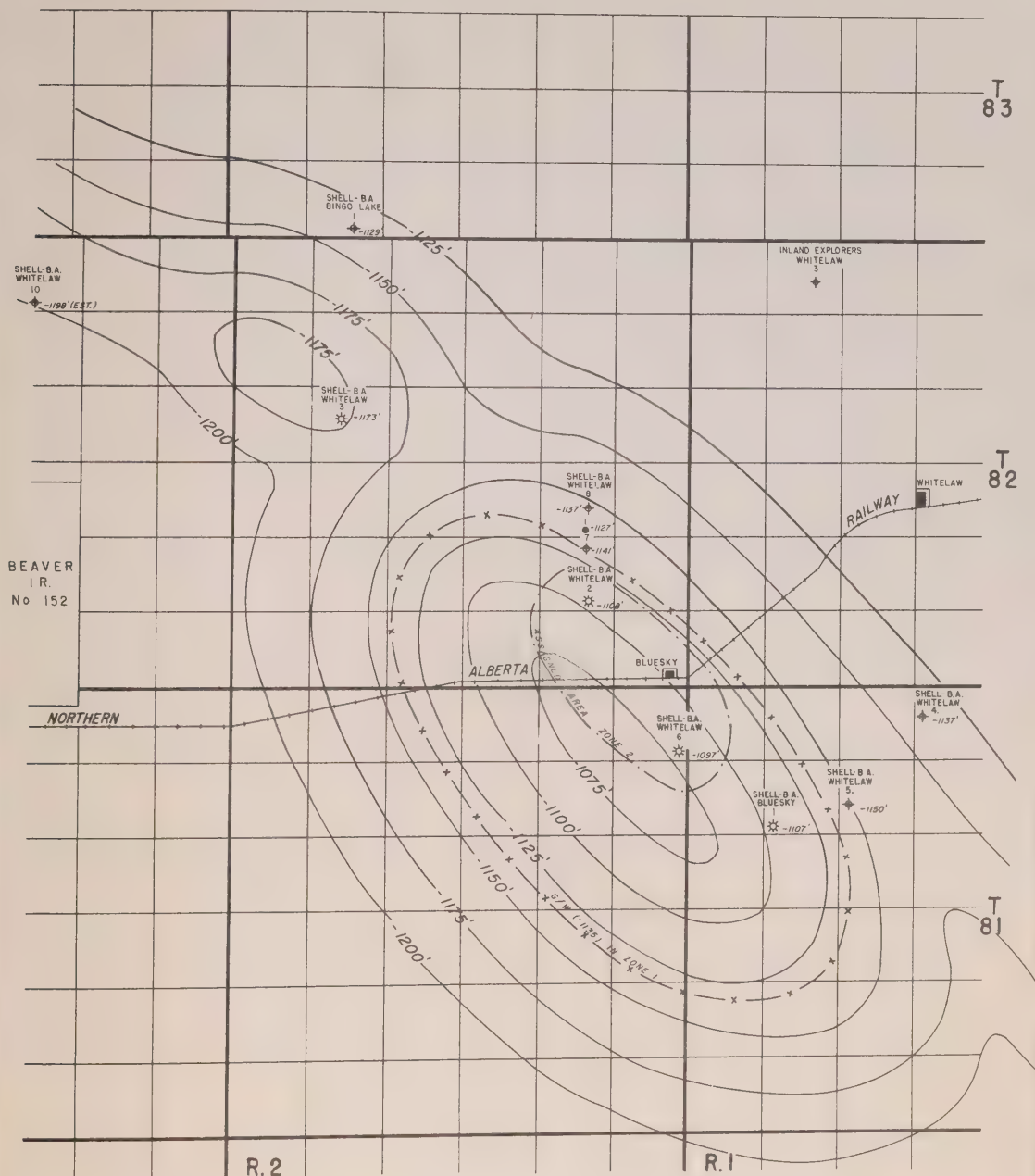
WHITELAW AREA ALBERTA

 ISOPACHOUS MAP
MIDDLE GETTING


WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957.

CALGARY, ALTA



WEST OF SIXTH MERIDIAN

-LEGEND-

- ★ GAS WELL
- OIL WELL
- ◆ DRY & ABANDONED
- ⊗ COMPLETED WELL IN THIS ZONE
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- PRINCIPAL ROADS

WHITELAW AREA ALBERTA

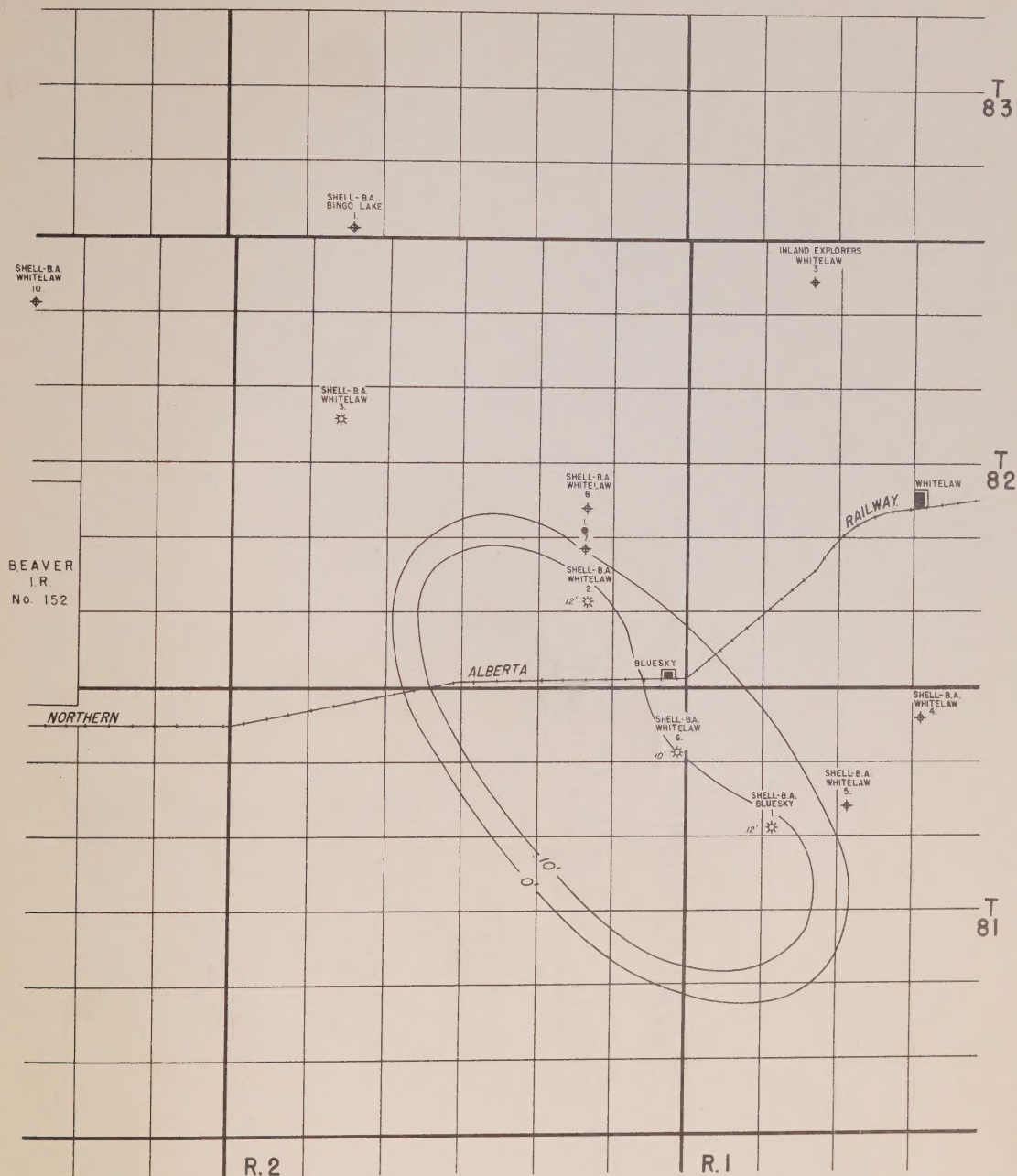
STRUCTURE MAP
CONTOURS ON TOP OF TRIASSIC

SCALE IN MILES
0 1/2 1 2 3

WESTCOAST TRANSMISSION CO

SEPTEMBER 1, 1957

CALGARY, ALTA



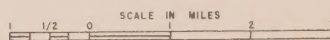
WEST OF SIXTH MERIDIAN

-LEGEND-

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- PRINCIPAL ROADS

WHITELAW AREA ALBERTA

ISOPACHOUS MAP
ZONE "I" TRIASSIC



WESTCOAST TRANSMISSION CO.

SEPTEMBER 1, 1957.

CALGARY, ALTA

